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Report of the
Auditor General
of Canada
to the House of Commons

Foreword and Main Points

October 1995



**Report of the
Auditor General
of Canada
to the House of Commons**

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AUDITOR GENERAL OF CANADA

VÉRIFICATEUR GÉNÉRAL DU CANADA

To The Honourable the Speaker of the House of Commons:

I have the honour to transmit herewith my second Report of 1995 to the House of Commons, to be laid before the House in accordance with the provisions of section 7(5) of the *Auditor General Act*.

A handwritten signature in dark ink, reading "L. Denis Desautels".

L. Denis Desautels, FCA
Auditor General of Canada

OTTAWA, 5 October 1995

Foreword and Main Points

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Report of the Auditor General to the House of Commons for October 1995

Foreword

In June 1994 the *Auditor General Act* was amended to provide authority to table each year one annual report, not more than three additional reports, and any special reports on matters of pressing importance or urgency.

My Office views this amendment as an opportunity to improve our service to Parliament. When we were limited to one annual report, members of Parliament were sometimes asked to deal with material that was no longer current. Having the authority to issue up to three additional reports a year will mean that we can provide more timely and relevant information on the results of our work.

Parliament's ability to address our audits without undue delay means that corrective action can be taken sooner and potential savings to the taxpayer increased. Because of the urgent need to reduce government deficits and the public debt, it is important for Parliament and the government to be able to demonstrate that identified opportunities for savings will be acted on swiftly.

I am pleased to table our second additional report. In addition to this Foreword and the Main Points that follow, there are eight chapters, issued separately:

- Information for Parliament – Deficits and Debt: Understanding the Choices
- Crown Corporations: Fulfilling Responsibilities for Governance
- Environmental Management Systems: A Principle-based Approach
- Systems under Development: Managing the Risks
- Canadian International Development Agency: Phased Follow-up of the Auditor General's 1993 Report – Phase I
- Industry Canada: Business Assistance Programs in Transition
- Public Works and Government Services Canada: Northumberland Strait Crossing Project
- Revenue Canada: Air Transportation Tax

This year, in addition to this October report and the one we issued in May, we will issue our annual Report as usual in late November. In future years we plan to table not more than three reports, but not necessarily three, in addition to the annual Report.

In this and future reports, chapters will be bound individually or grouped with others that address a similar subject with the same expected readership. In 1994 we experimented with separately bound chapters and determined that our readers found them more convenient to use and reference. In particular, the separate binding reduces the distribution of unneeded chapter copies. Our reports will continue to be available in electronic format and accessible on Internet.

Foreword (cont'd)

I will continue to publish in the annual Report my chapter identifying matters of special importance and interest. Generally, that report will also include "Other Audit Observations" and our regular follow-up on previous years' audit chapters. However, there may be occasions when, for reasons of subject matter or timing, it will be advantageous to publish some of that material with an additional report.

After the first yearly cycle of reports, I will undertake to consult with parliamentary committees and other members of Parliament as appropriate, to determine whether our scheduling of reports has been generally satisfactory or can be improved. We will also review the impact on departmental operations.

Our overriding goal is to make our service to Parliament as timely and relevant as possible. The amendments to the *Auditor General Act* have brought us closer to achieving that goal.



Information for Parliament

Deficits and Debt: Understanding the Choices

Assistant Auditor General: Ron Thompson

Responsible Auditor: Jeff Greenberg

Chapter 9 – Main Points

9.1 The federal government has been borrowing money and reporting that information since Confederation. As auditors, we believe that those financial numbers should not only be credible and understandable, but also useful. This means putting them into context by comparing the debt to some relevant reference point like the size of the economy. Doing that shows that for 1994–95, the federal debt of \$546 billion amounts to close to three quarters of the income generated by Canadians last year.

9.2 It is difficult to know, however, whether this debt burden is too high, too low or just right; that is largely a matter of opinion. In forming that opinion, Canadians need to understand that the larger the debt burden becomes, the greater the weight of interest charges and therefore the less available for program needs, without resorting to higher taxes.

9.3 While this is an uncomfortable situation, the alternative of reducing the debt burden to avoid the constraining effect of interest charges, namely through higher taxes and/or reduced spending, is also uncomfortable.

9.4 To date, discussions about fiscal policy have focussed on deficit reduction and balanced budgets. They have not given enough consideration to the larger question of how much debt we can sustain over the long haul, and how that fits within our view of taxation and the role of government. We believe that the government should engage Parliament in developing this vision.

9.5 For such a debate to be meaningful, Parliament needs information to help clarify the choices. We believe that the federal government ought to provide that longer-term information as part of the fall budget consultation process. In our view, only when government is committed to a vision about how much debt it is prepared to carry, and crafts budgets with that in mind, will it be possible for Canadians to assess how annual budgets fit into a longer-term vision for sustainable debt.

9.6 We conclude the chapter by reminding Parliament and the public that we have been speaking only about the federal government. The reality is that there are three levels of government taxing us and borrowing on our behalf. If we are ever to look beyond each jurisdiction in isolation and ask the question how much debt can Canadians carry, we need to know how much debt is owed by all levels of government in Canada. Information currently available doesn't answer that question very well. We believe that it should.



Assistant Auditor General: Wm. F. Radburn
Responsible Auditor: Grant Wilson

Crown Corporations

Fulfilling Responsibilities for Governance

Chapter 10 – Main Points

10.1 Public policy objectives and government activities are carried out through a variety of organizational forms. Although the number of entities is decreasing, the Crown corporation form continues to be the most significant outside of departments and agencies. Each form requires an appropriate degree of control and of accountability, and Crown corporations have a framework established for this purpose under Part X of the *Financial Administration Act*.

10.2 The Part X framework for Crown corporations permits flexibility in operations, with appropriate controls, and clearly sets out the mechanisms to account for the way responsibility has been fulfilled by those in authority. The control and accountability framework is a sound legislative framework and one that, in our view, has been working well over the 11 years it has been in force. A much improved situation exists today compared to that which prevailed prior to its introduction in 1984. In our view, Canadians are generally well served by this framework governing the activities of Crown corporations.

10.3 However, in the second cycle of special examinations (a type of value-for-money audit) conducted by the Office, in 80 percent of the active corporations there was at least one significant deficiency reported to the board of directors. The areas reported on most frequently related to: (1) corporate and strategic planning and (2) performance measurement and reporting. In fact, every corporation with a significant deficiency had at least one reported in one of these two areas.

10.4 In some corporations, corporate mandates may not have been adequately interpreted to allow objectives to be established in a way that would enable their achievement to be determined. In others, the type of performance information collected and reported is not oriented sufficiently toward the outcomes of corporate programs or activities. In only a few corporations we examined were actual results compared against meaningful targets. While information is often provided on what corporations do, insufficient information is provided on what is achieved. Consequently, government and Parliament are less able to hold corporations to account for their achievement of intended results.

10.5 The process and structure, called *governance*, used to direct and manage the affairs of the corporation with the objective of enhancing its value to Canadians can help to address these issues. Governance of Crown corporations is not solely the responsibility of the board of directors; active involvement of government and Parliament is also required. We outline a number of measures that might be taken by all those who have a governance responsibility.

10.6 The majority of Crown corporation chairs and CEOs, in responding to our survey in February 1995, supported the need for and worth of special examinations to the corporation, government and Parliament as a means of assessing accountability information. In preparing for the third cycle of special examinations, we anticipate achieving greater efficiencies and providing increased value to all those in the governance chain.

Chapter 10 – Main Points (cont'd)

10.7 Other matters relating to control and accountability of Crown corporations and their overall management include the following:

- Crown corporation debt has increased significantly;
- some corporations are subject to income tax while others are not;
- exempt Crown corporations should be revisited with the objective of establishing a framework for control and accountability similar to that in Part X; and
- reporting appropriations as revenue should be discontinued.



Assistant Auditor General: Robert R. Lalonde
Responsible Auditor: Wayne Cluskey

Environmental Management Systems

A Principle-based Approach

Chapter 11 – Main Points

11.1 The purpose of this report is to identify the elements of a good environmental management system; to identify key practices of good environmental management; and to describe the roles and responsibilities of the Treasury Board Secretariat and Environment Canada, and results of activities undertaken by them, in identifying and communicating good practices for successfully implementing environmental management systems.

11.2 The International Organization for Standardization (ISO) defines an environmental management system (EMS) as “that part of the overall management system which includes organizational structure, planning activities, responsibilities, practices, procedures, processes, and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy.” A properly designed EMS will provide the framework for practices designed to help an organization manage its environmental agenda and document and communicate its environmental performance. Organizations implementing environmental management systems (EMS) can learn from the practices and experiences of other organizations that have already begun implementing an EMS. This report highlights some of those practices.

11.3 This Office can also learn from the practices of other organizations. We intend to use the knowledge we have acquired about environmental management systems in our future work on environment and sustainable development issues.

11.4 Federal departments and agencies are responsible for managing their own environmental risks and responsibilities. To assist and guide federal departments and agencies, the Treasury Board Secretariat issues guidance documents that include policies, directives and guidelines. Departments and agencies then apply that guidance. Environment Canada is responsible for administering legislation related to the environment as well as providing technical assistance to departments and agencies in environmental matters.

11.5 An organization may decide to pattern its environmental management practices on one of many existing environmental management models. Sound environmental management principles are not different from good management principles. The exact content of a particular management model is not as important as the principles it embodies. One principle-based environmental management systems model that is gaining international acceptance is ISO 14004, currently being drafted by the International Organization for Standardization.

11.6 The private sector organizations we interviewed were selected on the basis that they had or were likely to have good environmental practices. They were generally further advanced than the federal departments and agencies in implementing comprehensive environmental management systems. Nevertheless, very few of the organizations we interviewed in either the private or the public sector have developed fully all of the elements of an environmental management system. The federal government has taken steps, through initiatives such as the Environmental Accountability Partnership, to improve its environmental management practices.

11.7 An EMS model provides only the starting point from which to build an effective environmental management system. Continual improvement of the organization’s environmental performance is ultimately what is most important.



Systems under Development

Managing the Risks

Assistant Auditor General: David H. Roth

Responsible Auditor: Eric Anttila

Chapter 12 – Main Points

12.1 Organizations today view the successful introduction of technology as being critical to their success. They are looking to the significant potential offered by information technology to reduce costs and improve service. The Canadian federal government is no exception.

12.2 The implementation of systems development projects, in both the private and public sector, is characterized by risk and uncertainty. Accordingly, it is imperative that the risks be identified, evaluated and effectively managed.

12.3 We found that only one of the four systems under development that we reviewed — Transport Canada's Integrated Departmental Financial and Materiel Management System (IDFS) — is currently being managed in a way that deals effectively with the risks associated with the project. Of the remaining three, the Public Service Compensation System (PSCS) has been terminated by Public Works and Government Services Canada; the Common Departmental Financial System (CDFS), being developed by Public Works and Government Services Canada, has only a small number of committed users, and the Income Security Program Redesign (ISPR) requires continued corrective action by management of Human Resources Development Canada to reduce project risks.

12.4 In its attempt to develop PSCS, Public Works and Government Services Canada has spent approximately \$61 million, of the estimated total project cost of \$119.5 million, for which the planned benefits will not be realized.

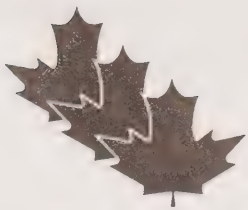
12.5 Private sector research indicates, and our own risk assessment supports the view, that the likelihood of large multi-year systems development initiatives being completed on time, within budget and with the desired functionality (what the system should do for its users) in the public and private sectors is extremely low.

12.6 To improve the likelihood of successfully introducing information technology, the government will need to focus on implementing its long-term information technology strategies through smaller, more manageable components, each of which provides an improved capability (efficiency and/or effectiveness) to the organization.

12.7 Among the factors critical to managing the risks that affect the successful introduction of information technology are:

- effective project sponsorship by an individual who can ensure that the organization understands and achieves the planned benefits from the systems development project;
- clearly defined functional and system requirements;
- effective user involvement and commitment to the success of the project; and
- the expertise and experience of resources dedicated to the project.

12.8 Departments and the Treasury Board Secretariat (TBS) have acknowledged the difficulties and risks in delivering large information technology projects, and the Secretariat has undertaken a major review of the factors contributing to the difficulties. TBS is currently working with departments on a variety of changes to project initiation, management and monitoring processes.



*Assistant Auditor General: Richard B. Fadden
Responsible Auditor: Vinod Sahgal*

Canadian International Development Agency

Phased Follow-up of the Auditor General's 1993 Report — Phase I

Chapter 13 – Main Points

A New Approach: Phased Follow-up

13.11 An important element in our work is follow-up of actions taken by departments and agencies in response to concerns raised in our previous Reports. This chapter represents a new and innovative way of reporting to Parliament on how an organization has responded.

13.12 A three-phased follow-up approach has been designed to reinforce CIDA's accountability to Parliament. An ongoing self-assessment by the Agency on its progress in dealing with concerns raised by the Auditor General is central to this approach. It is intended to foster greater ownership by the Agency of such concerns and a greater commitment to implementing measures to address them.

13.13 Our opinion on the extent to which CIDA's actions have satisfactorily resolved the concerns raised in our 1993 Report will be rendered in 1997 after all our audit work is complete.

CIDA's Self-Assessment (Phase I)

13.14 CIDA has begun a major initiative aimed at transforming the Agency into a more results-oriented, focussed, efficient and accountable organization. The initial focus of this initiative was on management practices. In the Agency's view, progress to date has been significant.

13.15 Over the next two years, CIDA will concentrate on ensuring that its reforms are translated into program delivery in the field. The Agency is confident that the continuation of renewal will lead to the satisfactory resolution of the main concerns raised by the Auditor General in his 1993 Report.

Our Comments on Actions Reported by CIDA

13.16 CIDA's self-assessment report addresses the principal concerns raised in our 1993 Report. The Agency has developed a results-based management concept to strengthen its effectiveness. The clarity with which CIDA has acknowledged its accountability to Parliament for results and the emphasis it is placing on coherence in pursuing the government's priorities in Official Development Assistance are noteworthy.

13.17 Insightful analysis of Canada's strengths and how they correspond with developing countries' needs, as well as courageous decisions, will continue to be required to achieve the policy objectives set by the government.

13.18 The need remains for developing a contracting approach that defines the respective accountabilities and risks of both CIDA and its executing agents in the new context of results-based management.

13.19 There is also a call for greater transparency. Canadians want to be sure that their aid dollars are being used effectively — that their help is making a difference in the lives of people benefiting from Canadian assistance by increasing their self-reliance.

13.20 It would therefore be timely to accelerate the development of indicators that are simple and usable for measuring and reporting on the Agency's results. Any further delay in this area could well adversely impact on CIDA's credibility. CIDA needs a comprehensive tracking and reporting system to assess the quality and status of its projects.

Chapter 13 – Main Points (cont'd)

13.21 The report on Phase II of the “phased follow-up”, due in 1996, will focus on how successfully CIDA has commenced implementing its results-based management concept in the field.

13.22 In a time of substantial budget cutbacks, it is more important than ever that CIDA be in a position to demonstrate to Parliament which of its channels and program instruments are yielding the best results in achieving those objectives that have the highest priority.



Assistant Auditor General: Maria Barrados
Responsible Auditor: Gerry Chu

Industry Canada

Business Assistance Programs in Transition

Chapter 14 – Main Points

14.1 We audited four financial assistance programs, support to tourism and the Canada Business Service Centre initiative. Significant changes have been made to many of the programs audited.

14.2 Three financial assistance programs — Microelectronics and Systems Development, Strategic Technologies, and Technology Outreach have been terminated or are not being renewed. The Sector Campaigns were terminated. A new Tourism Commission has been established to take over Industry Canada's existing tourism programming. The commitment to Canada Business Service Centres is continuing and growing.

High-Technology Financial Contributions Programs

14.3 These programs are complex, entailing a long, multistep project approval process. Some of the assessment criteria are difficult to apply. However, improvements can be made in support for funding decisions. Where similar programs are operated by other departments, opportunities exist to improve the co-ordination of review and assessment procedures through sharing information and analysis of results. Progress is being made in developing and reporting performance measurement.

14.4 Our findings identify ongoing concerns for the management of the remaining program commitments and obligations. They also raise issues of potential importance to many other government programs that provide assistance through contributions. For example, the Department's implementation of the repayable contributions policy needs to be reviewed to ensure that it is consistent with the intent of the policy.

14.5 There is a risk that, as the government withdraws from some program areas, its remaining obligations will be undermanaged. Even though programs are not being renewed or are being terminated, they retain risks that require management attention. Our audit identified areas where management needs to remain attentive, including ensuring that payments are made only for eligible costs and that contributions repayable to the Crown are managed appropriately.

Tourism

14.6 Industry Canada continued to have difficulties both in developing co-ordinated approaches to the tourism activities and in evaluating the effectiveness of the tourism sub-agreements.

14.7 The challenge for the newly formed Canadian Tourism Commission will be to develop co-ordinated approaches to the management of these activities and to work closely with other federal departments and agencies to develop co-operative approaches in tourism initiatives.

Chapter 14 – Main Points (cont'd)

Canada Business Service Centres (CBSC)

14.8 This initiative was introduced in 1992–93 to serve business better by creating one access point. In a short period of time, CBSCs have made progress in forming partnerships with federal departments, agencies and provinces, and 10 centres have been established.

14.9 Judging the success of the CBSC network requires that a clear vision of the concept be articulated. In addition, expectations for the core services to be provided have yet to be defined.

14.10 The centres are at a key juncture in their development, and must decide quickly with their partners what their long-term vision and strategy should be. The federal government can then in turn more easily determine its most effective contribution to integrating access to business services.



Assistant Auditor General: David Rattray
Responsible Auditor: Tony Brigandi

Public Works and Government Services Canada

Northumberland Strait Crossing Project

Chapter 15 – Main Points

15.1 The Northumberland Strait Crossing Project (fixed link) is a large, organizationally complex project with unique financing and project management features. Although cited as a private sector project, the government has significant contractual responsibilities and financial requirements associated with it.

15.2 The government's intention with the fixed link was to cap and then transfer the subsidy for the present ferry service to the private sector in return for the construction and operation of the bridge; the private sector was to assume most of the project risks. After 35 years, the government would stop the stream of payments to the bondholders, who financed the construction costs, and take over the bridge, facilities, and related operations.

15.3 Our findings on risk management indicate that the Northumberland Strait Crossing Project shows definite improvement over previous megaprojects, specifically in the protection of the Crown against potential cost overruns and withdrawal of support by private sector contractors, follow-up of environmental requirements, and provision of project information.

15.4 The procurement process was transparent and reasonable. Technical performance requirements were sorted out early in the process, and three contenders bid on the financial security package and price.

15.5 The annual transportation subsidy of \$41.9 million (1992 dollars indexed to inflation) that the government agreed to pay to finance the project is at the high end of the range of estimates for the present ferry subsidy.

15.6 The government played a critical role by enhancing the credit rating of the subsidy bonds to finance construction of the bridge.

15.7 The financing of the fixed link through a complex off-balance-sheet financing arrangement is a departure from the practice of direct borrowing for the acquisition of infrastructure assets. In present-value terms, we estimate that financing costs could have been reduced by about \$45 million had the government raised this debt through its own borrowing program. The government will need to weigh carefully the costs and benefits of using such off-balance-sheet financing arrangements for any future projects.

15.8 The security package the government demanded from the developer is comprehensive and should provide adequate protection to the Crown.

15.9 In our view, the advance income tax rulings that were provided to the consortium did not violate the intent of the *Income Tax Act*.

15.10 The \$661 million debt to private sector bondholders to finance the construction of the bridge does not appear on the balance sheet of the federal government. At the time of writing, the government was studying the appropriate accounting for and disclosure of the transaction. Preliminary indications are that the government intends to record its interest in this project in the 1994–1995 Public Accounts. The final results of this study, together with observations on it by the Auditor General, will be included in the 1994–95 Public Accounts to be tabled in Parliament later this year.

15.11 The requirements of the Environmental Assessment and Review Process were met for the fixed link. There is provision for ongoing environmental protection and treatment of emerging problems during construction and operation; and Public Works and Government Services Canada has established an effective oversight process.



Assistant Auditor General: Shahid Minto

Responsible Auditor: Jim Ralston

Revenue Canada

Air Transportation Tax

Chapter 16 – Main Points

16.1 The Air Transportation Tax (ATT) was put in place in 1974. For the year ended 31 March 1995, revenue from the tax totalled almost \$589 million. Revenue Canada administers the tax and transfers its proceeds to Transport Canada where they are applied against expenditures for facilities and services provided in respect of air travel.

16.2 The key administrative memorandum relating to the ATT was issued in 1989 and has not been updated to reflect subsequent amendments to the applicable legislation. In 1993, Revenue Canada started a project to replace the old memorandum with a new document in loose-leaf format to facilitate updating. At this time, only a draft version of the document is available.

16.3 There is no centre of ATT expertise in Revenue Canada. The Department's headquarters is organized along functional lines, and responsibility for dealing with the 182 air carriers licensed to collect the tax is decentralized in district offices. The low volume of ATT-related workload in most locations affects the Department's ability to maintain the expertise needed to conduct audits and provide rulings or other assistance to air carriers. There is also a risk that air carriers will be treated inconsistently in different regions of the country.

16.4 Audit coverage has been weak in recent years due to the demands placed on audit resources by the introduction of the Goods and Services Tax. There has been some resurgence of effort recently in some district offices. During the period in which coverage was low, a number of taxation years became "statute barred" (unavailable for audit) for one major carrier. A significant loss of revenue may have resulted.

16.5 Some large balances of outstanding ATT have become uncollectable due to the financial difficulties experienced by certain air carriers in the years following deregulation of the air transportation industry. The largest part of the dollar value of accounts receivable, which totalled almost \$21 million at 31 March 1995, is represented by 10 air carriers.

Report of the Auditor General of Canada to the House of Commons – 1995

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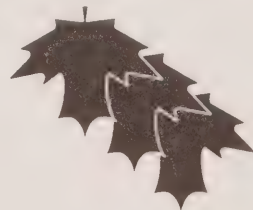
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16	Revenu Canada : Taxe de transport aérien



Chapitre 16 – Points saillants

16.1 La taxe de transport aérien (TTA) a été instituée en 1974. Pour l'exercice se terminant le 31 mars 1995, les recettes provenant de cette taxe ont presque atteint 589 millions de dollars. Revenu Canada applique la taxe et il en verse le produit à Transports Canada, qui utilise ce produit pour compenser le coût des installations et des services offerts dans le domaine du transport aérien.

16.2 Le principal document d'application portant sur la TTA est un « mémorandum » qui date de 1989 et qui n'a pas été mis à jour conséquemment aux modifications apportées aux dispositions législatives pertinentes. En 1993, Revenu Canada a entrepris de remplacer l'ancien mémorandum par un document nouveau, qui consistera en feuillets mobiles pour une mise à jour plus facile. Le nouveau document n'existe maintenant que sous forme d'ébauche.

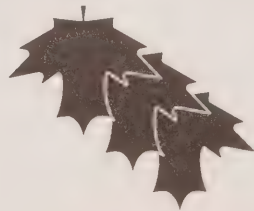
16.3 Il n'existe à Revenu Canada aucun noyau d'expertise en TTA. L'Administration centrale du Ministère est structurée selon les responsabilités fonctionnelles, tandis que la responsabilité de traiter avec les 182 transporteurs aériens titulaires d'une licence pour percevoir la taxe est décentralisée et incombe aux bureaux de district. En raison du faible volume de travail ayant trait à la TTA dans la plupart des bureaux, le Ministère peut difficilement maintenir l'expertise nécessaire pour effectuer des vérifications, pour rendre des décisions à l'intention des transporteurs aériens ainsi que pour leur apporter d'autres formes d'aide. De plus, le Ministère risque ainsi de traiter les transporteurs aériens différemment selon la région du pays.

16.4 L'étendue de la vérification de la TTA a été faible ces dernières années en raison de la forte demande exercée sur les ressources de vérification par l'entrée en vigueur de la taxe sur les produits et services. Certains bureaux de district ont récemment intensifié les efforts déployés pour vérifier la TTA. Au cours de la période où l'étendue de la vérification de la TTA atteignait de bas niveaux, un certain nombre d'années d'imposition sont devenues « frappées de prescription » (c'est-à-dire qu'elles ne peuvent plus faire l'objet d'une vérification) dans le cas d'un transporteur important. Cela peut avoir entraîné une perte de recettes considérable.

16.5 Des soldes importants de TTA impayée sont devenus irrécouvrables à cause des difficultés financières que certains transporteurs aériens ont éprouvées dans les années suivant la déréglementation du transport aérien. La valeur des créances au titre de la TTA atteignait presque 21 millions de dollars le 31 mars 1995, et la majeure partie de cette somme consistait en dettes de seulement 10 transporteurs aériens.

15.10 Les 661 millions de dollars dus aux obligataires du secteur privé pour financer la construction du pont ne figurent pas au bilan du gouvernement fédéral. Au moment de la rédaction de notre rapport, le gouvernement étudiait quelle méthode de comptabilité et de présentation convenait pour cette transaction. Selon des indications préliminaires, le gouvernement a l'intention de signaler son obligation à l'égard de ce projet dans les Comptes publics de 1994-1995. Les résultats définitifs de cette étude, ainsi que les observations du vérificateur général à ce sujet, seront inclus dans les Comptes publics de 1994-1995 qui seront présentés au Parlement plus tard dans l'année.

15.11 Le pont satisfait aux exigences du processus d'évaluation et d'examen en matière d'environnement. Des dispositions sont prévues pour protéger l'environnement et régler les problèmes au cours de la construction et de l'exploitation du pont. Travaux publics et Services gouvernementaux Canada a établi un processus de surveillance efficace.



Chapitre 15 – Points saillants

15.1 Le projet de raccordement dans le détroit de Northumberland (raccordement permanent) est un grand projet complexe, dont les caractéristiques financières et de gestion sont uniques. Même s'il a été dit qu'il s'agit d'un projet du secteur privé, le gouvernement a d'importantes responsabilités contractuelles et obligations financières à cet égard.

15.2 L'intention du gouvernement était de plafonner la subvention accordée pour le service de traversiers actuel et de la transférer au secteur privé qui devait, en contrepartie, construire et exploiter le pont; le secteur privé devait assumer la plupart des risques du projet. Après 35 ans, le gouvernement cesserait de verser des paiements aux obligataires ayant financé les coûts de construction et reprendrait le pont, les installations et les opérations connexes.

15.3 Selon nos constatations sur la gestion du risque, le projet de raccordement dans le détroit de Northumberland constitue une nette amélioration par rapport aux mégaprojets antérieurs, surtout du point de vue de la protection de l'État contre les dépassements de coûts possibles et le retrait de l'appui des entrepreneurs du secteur privé, du suivi des exigences environnementales et de la présentation d'information sur le projet.

15.4 Le processus d'approvisionnement a été transparent et raisonnable. Les exigences de rendement technique ont été définies clairement dès le début du projet; trois soumissionnaires ont présenté une proposition de garanties financières et de prix.

15.5 La subvention annuelle au transport de 41,9 millions de dollars (dollars de 1992, indexés sur l'inflation) que le gouvernement a convenu de payer pour financer le projet, se situe à la limite supérieure du montant prévu pour la subvention accordée actuellement au service de traversiers.

15.6 Le gouvernement a joué un rôle important en haussant la cote de crédit des garanties de subventions nécessaires pour financer la construction du pont.

15.7 Les dispositions hors-bilan complexes sont un moyen inhabituel de financement par rapport à l'emprunt direct généralement utilisé pour l'acquisition d'infrastructures. Du point de vue de la valeur actuelle, nous considérons que les coûts de financement auraient pu être inférieurs d'environ 45 millions de dollars si le gouvernement s'était procuré l'argent nécessaire en ayant recours à son propre programme d'emprunt. Le gouvernement devra examiner attentivement les coûts et les avantages du recours à ce mode de financement hors-bilan pour tout projet futur.

15.8 Les garanties exigées du promoteur par le gouvernement sont exhaustives et devraient suffire à protéger l'État de façon adéquate.

15.9 À notre avis, les décisions anticipées en matière d'impôt données au consortium ne sont pas contraires à l'esprit de la Loi de l'impôt sur le revenu.

14.6 Industrie Canada a continué d'éprouver des difficultés quand il s'est agi d'élaborer des approches coordonnées à l'égard des activités reliées au tourisme et d'évaluer l'efficacité des ententes auxiliaires dans ce domaine.

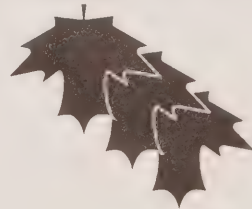
14.7 Pour la Commission canadienne du tourisme, nouvellement créée, le défi consistera à élaborer des approches coordonnées pour la gestion de ces activités et à travailler en étroite collaboration avec d'autres ministères et organismes fédéraux en vue d'élaborer des approches concertées dans le cadre des initiatives concernant le tourisme.

Centres de services aux entreprises du Canada (CSEC)

14.8 L'initiative des Centres de services aux entreprises du Canada a été lancée en 1992-1993 dans le but de mieux servir les entreprises grâce à la mise en place d'un guichet unique. Les CSEC n'ont pas tardé à accomplir des progrès en établissant des partenariats avec des ministères et organismes fédéraux ainsi qu'avec les provinces, et dix centres ont été créés.

14.9 Pour évaluer le succès du réseau des CSEC, il faut formuler une vision claire de ce concept. En outre, le Ministère n'a pas encore déterminé les attentes quant aux services de base que doivent offrir les CSEC.

14.10 Les Centres en sont à une étape clé de leur évolution et doivent décider rapidement, de concert avec leurs partenaires, quelles seront leur vision et leur stratégie à long terme. Le gouvernement fédéral pourra ensuite déterminer avec une plus grande facilité de quelle manière il contribuera le plus efficacement possible à la centralisation de l'accès aux services aux entreprises.



Chapitre 14 – Points saillants

14.1 Nous avons vérifié quatre programmes d'aide financière, le soutien du tourisme et l'initiative des Centres de services aux entreprises du Canada. Bon nombre des programmes vérifiés ont fait l'objet de modifications importantes.

14.2 Trois programmes d'aide financière, à savoir Microélectronique et développement des systèmes, Technologies stratégiques et Mise en valeur de la technologie, ont pris fin ou ne sont pas reconduits. Les Campagnes sectorielles en sont aussi à leur terme. La Commission canadienne du tourisme a été créée pour prendre en charge les programmes existants d'Industrie Canada dans le domaine du tourisme. Le Ministère déploie de plus en plus d'efforts pour mener à bien l'initiative des Centres de services aux entreprises du Canada.

Programmes de contribution financière s'adressant au secteur de la technologie de pointe

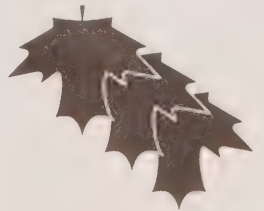
14.3 Ces programmes de nature complexe supposent un long processus d'approbation des projets qui comporte plusieurs étapes. Certains critères d'évaluation sont difficiles à appliquer, mais le Ministère peut apporter des améliorations au chapitre des évaluations et des analyses à l'appui des décisions en matière de financement. Dans les cas où d'autres ministères gèrent des programmes similaires, il est possible d'améliorer la coordination des procédures d'examen et d'évaluation en mettant en commun l'information et l'analyse des résultats. Le Ministère accomplit des progrès dans l'élaboration d'un mécanisme de mesure du rendement et dans la présentation d'information sur cet aspect.

14.4 Nos constatations font ressortir les préoccupations constantes que suscite la gestion des engagements et des obligations découlant des programmes et incombant toujours au Ministère. Elles soulèvent aussi des questions susceptibles de se révéler importantes pour de nombreux autres programmes gouvernementaux accordant une aide sous forme de contributions. Par exemple, il faut examiner la mise en oeuvre, par le Ministère, de la politique concernant le remboursement des contributions pour s'assurer qu'elle est compatible avec le but visé par cette politique.

14.5 Si le gouvernement se retire de certains secteurs de programmes, il est possible que les obligations qui continueront de lui incomber ne soient pas gérées adéquatement. Même si des programmes ne sont pas reconduits ou s'ils prennent fin, ils continuent de présenter des risques exigeant l'attention de la direction. Notre vérification a fait ressortir des domaines sur lesquels la direction doit continuer de porter son attention, notamment en s'assurant que les paiements s'appliquent uniquement à des coûts admissibles et que les contributions remboursables à l'État font l'objet d'une saine gestion.

Chapitre 13 – Points saillants (suite)

- 13.18** Reste la nécessité d'élaborer une stratégie de passation de marchés qui définisse l'obligation redditionnelle et les risques des agents d'exécution et de l'ACDI respectivement, dans le nouveau contexte de la gestion axée sur les résultats.
- 13.19** Une plus grande transparence est également nécessaire. Les Canadiens veulent la certitude que l'aide du Canada au développement est mise efficacement à profit et qu'elle fait une différence dans la vie des personnes qui en bénéficient, en augmentant leur autonomie.
- 13.20** Il serait donc temps d'accélérer l'élaboration d'indicateurs qui soient simples et utilisables pour mesurer les résultats de l'Agence et en faire rapport. Tout autre délai dans ce domaine pourrait miner la crédibilité de l'ACDI. L'Agence a besoin d'un système exhaustif de suivi et de communication de l'information pour évaluer la qualité et l'état d'avancement de ses projets.
- 13.21** Le rapport de la Phase II du suivi échelonné, prévu pour 1996, portera sur la mesure dans laquelle l'ACDI aura mené à bien la mise en oeuvre, sur le terrain, de son concept de gestion axée sur les résultats.
- 13.22** En période de grandes compressions budgétaires, il est plus important que jamais que l'ACDI soit en mesure d'expliquer au Parlement lesquels des canaux d'acheminement et instruments de programme qu'elle utilise contribuent le plus à l'atteinte des objectifs les plus prioritaires.



Chapitre 13 – Points saillants

Une nouvelle approche : « Le suivi échelonné »

13.11 Un élément important de notre travail est le suivi que nous faisons des mesures prises par les ministères et les organismes pour régler les problèmes soulevés dans les précédents rapports du vérificateur général. Ce chapitre représente une formule nouvelle et innovatrice d'informer le Parlement de la façon dont un organisme a réagi à notre rapport de vérification.

13.12 L'approche du suivi échelonné en trois phases est conçue de manière à renforcer l'obligation faite à l'ACDI de rendre des comptes au Parlement. Une évaluation continue, par l'Agence elle-même, de ses progrès dans le règlement des problèmes soulevés par le vérificateur général est essentielle. Elle vise à amener l'Agence à assumer davantage de tels problèmes et à obtenir un engagement plus vigoureux de mettre en oeuvre diverses mesures pour les régler.

13.13 En 1997, lorsque tous nos travaux de vérification seront terminés, nous formulerons une opinion sur la mesure dans laquelle les moyens pris par l'ACDI ont répondu de façon satisfaisante aux préoccupations que nous avons soulevées dans notre rapport de 1993.

Auto-évaluation de l'ACDI (Phase I)

13.14 L'ACDI a lancé une grande initiative visant à faire de l'Agence un organisme davantage axé sur les résultats, polarisé, efficient et responsable. L'initiative de l'ACDI a été articulée au départ sur les pratiques de gestion. L'Agence considère que, jusqu'à présent, ses progrès ont été considérables.

13.15 Au cours des deux prochaines années, l'ACDI s'emploiera à traduire ses réformes dans l'exécution de ses programmes sur le terrain. L'Agence a bon espoir que la poursuite de l'initiative de renouveau amènera au règlement satisfaisant des principales préoccupations soulevées par le vérificateur général dans son rapport de 1993.

Nos commentaires sur les mesures dont l'ACDI a fait rapport

13.16 Le rapport d'auto-évaluation de l'ACDI porte sur les principales préoccupations soulevées dans notre rapport de 1993. L'Agence a mis au point un concept de gestion axé sur les résultats pour améliorer son efficacité. La clarté avec laquelle l'ACDI a reconnu son obligation de rendre compte de ses résultats au Parlement et l'accent qu'elle met sur la cohérence dans la poursuite des priorités gouvernementales liées à l'aide publique au développement sont dignes de mention.

13.17 L'atteinte des objectifs stratégiques fixés par le gouvernement continuera d'exiger une analyse en profondeur des points forts du Canada et de la mesure dans laquelle ils correspondent aux besoins des pays en développement, ainsi que la prise de décisions politiques courageuses.

Chapitre 12 – Points saillants (suite)

12.8 Les ministères et le Secrétariat du Conseil du Trésor (SCT) ont reconnu les difficultés et les risques liés aux grands projets d'introduction de technologies de l'information. De plus, le Secrétariat a entrepris un examen en profondeur des facteurs qui les sous-tendent. Le SCT apporte actuellement, en collaboration avec les ministères, divers changements aux processus de lancement, de gestion et de surveillance des projets.

Les systèmes en développement

Gérer les risques



Vérificateur général adjoint : David H. Roth
Vérificateur responsable : Eric Anttila

Chapitre 12 – Points saillants

12.1 Les organisations modernes considèrent que l'introduction fructueuse de technologies est cruciale pour leur succès. Elles s'intéressent à l'immense potentiel qu'offrent les technologies de l'information afin de réduire les coûts et d'améliorer les services. Le gouvernement fédéral du Canada ne fait pas exception à la règle.

12.2 La réalisation de projets de développement de systèmes, que ce soit dans les secteurs privé ou public, s'accompagne de risques et d'incertitude. En conséquence, il faut absolument relever les risques, les évaluer et bien les gérer.

12.3 Nous avons constaté que seulement un des quatre systèmes en développement que nous avons examinés, soit le Système ministériel intégré de gestion des finances et du matériel (SFIM) de Transports Canada (TC), est actuellement géré d'une façon qui tient bien compte des risques. Des trois autres, le Système de rémunération de la fonction publique (SRFP) a été abandonné par Travaux publics et Services gouvernementaux Canada (TPSGC), le Système financier ministériel commun (SFMC), développé actuellement par TPSGC, ne compte qu'un petit nombre d'utilisateurs fermes et le projet de Remaniement des programmes de la sécurité du revenu (RPSR) exige que la direction de Développement des ressources humaines Canada (DRHC) ne cesse de prendre des mesures correctives en vue d'en réduire les risques.

12.4 TPSGC a consacré environ 61 millions de dollars au développement du SRFP dont les avantages prévus ne seront pas réalisés. Le coût total du projet devait s'établir à 119,5 millions de dollars.

12.5 À l'instar de notre propre évaluation des risques, des études du secteur privé concluent qu'il est fort peu probable que les grands projets pluriannuels de développement de systèmes soient terminés dans les délais et le budget prévus et qu'ils aboutissent à la fonctionnalité souhaitée, tant dans le secteur public que dans le secteur privé.

12.6 Pour accroître les chances d'introduire avec succès les technologies de l'information, le gouvernement devra viser à mettre en oeuvre ses stratégies à long terme dans ce domaine par composantes plus petites et plus faciles à gérer, dont chacune accroîtra la capacité (l'efficacité) de l'organisation.

12.7 Les facteurs importants pour la gestion des risques liés à l'introduction fructueuse de technologies de l'information sont notamment :

- le partenariat efficace du projet, par une personne pouvant voir à ce que l'organisation comprenne et concrétise les avantages anticipés d'un projet de développement de systèmes;
- une définition claire des exigences des fonctions et du système;
- la participation et l'engagement réels des utilisateurs éventuels;
- les compétences et l'expérience des ressources affectées au projet.

Chapitre 11 – Points saillants (suite)

11.6 De façon générale, les entreprises privées que nous avons consultées ont été retenues parce qu'elles appliquaient de bonnes pratiques environnementales ou étaient susceptibles de le faire. Ces entreprises étaient, en général, plus avancées que les ministères et les organismes du gouvernement fédéral dans la mise en application d'un système intégré de gestion de l'environnement. Toutefois, seul un très faible nombre des organisations consultées, tant du secteur privé que du secteur public, avaient achevé l'élaboration de tous les éléments de leur SGE. Le gouvernement fédéral a pris les mesures voulues, dans le cadre d'initiatives telles que le Partenariat en matière de responsabilisation environnementale, pour améliorer ses pratiques de gestion de l'environnement.

11.7 Un modèle de SGE ne fournit qu'un point de départ pour l'élaboration d'un système efficace de gestion de l'environnement. En définitive, ce qui compte avant tout, c'est l'amélioration continue du rendement environnemental de l'organisation.

Les systèmes de gestion de l'environnement Une approche fondée sur des principes

Vérificateur général adjoint : Robert R. Lalonde
Vérificateur responsable : Wayne Cluskey



Chapitre 11 – Points saillants

11.1 L'objet de ce rapport est de déterminer les éléments d'un bon système de gestion de l'environnement (SGE); de mettre en évidence les pratiques essentielles d'une saine gestion de l'environnement; et de décrire les rôles et les responsabilités du Secrétaire du Conseil du Trésor et d'Environnement Canada ainsi que les résultats des activités entreprises par ces derniers en vue de caractériser et de faire connaître les bonnes pratiques favorisant la mise en place des SGE.

11.2 L'Organisation internationale de normalisation (ISO) définit un SGE comme suit : la partie du système de gestion global qui comprend la structure, les activités de planification, les responsabilités, les pratiques, les procédures, les mécanismes et les ressources qu'une organisation doit avoir pour assurer l'élaboration, la mise en oeuvre, la réalisation, l'examen et le maintien de la politique environnementale. Un SGE bien conçu fournit à une organisation un cadre de pratiques nécessaire pour assumer ses engagements liés à l'environnement et évaluer son rendement dans ce domaine et en rendre compte. Les organisations qui entreprennent de mettre en place un SGE peuvent tirer profit des pratiques et des expériences des autres organisations qui ont déjà adopté un tel système. Nous examinerons les points saillants de certaines de ces pratiques dans le présent rapport.

11.3 Le Bureau du vérificateur général peut aussi tirer profit des pratiques des autres organisations. Nous avons l'intention d'utiliser les connaissances acquises au sujet des SGE dans nos travaux futurs sur les questions liées à l'environnement et au développement durable.

11.4 Les ministères et les organismes fédéraux sont chargés de la gestion de leurs propres risques et responsabilités liés à l'environnement. Afin de les aider et de les conseiller, le Secrétaire du Conseil du Trésor diffuse des documents d'orientation présentant des politiques, des directives et des lignes directrices. Les ministères et les organismes peuvent alors appliquer ces conseils. Environnement Canada est responsable de l'administration des lois sur l'environnement. Il fournit également aux ministères et aux organismes une aide technique concernant des questions liées à l'environnement.

11.5 Pour orienter ses pratiques de gestion de l'environnement, une organisation peut décider de prendre pour modèle l'un des nombreux systèmes existants de gestion de l'environnement. Les principes judicieux de gestion de l'environnement ne diffèrent pas des bons principes de gestion. Le contenu exact d'un modèle de gestion importe moins que les principes qui le gouvernent. L'Organisation internationale de normalisation est en train d'élaborer, sous le titre ISO 14004, un modèle de SGE fondé sur des principes et reconnu par un nombre sans cesse croissant de pays.

Chapitre 10 – Points saillants (suite)

10.7 Voici quelques-unes des autres questions ayant trait au contrôle et à la responsabilisation des sociétés d'État et de leur gestion générale :

- la dette des sociétés d'État a considérablement augmenté;
- certaines sociétés sont soumises au régime de l'impôt sur le revenu, d'autres ne le sont pas;
- les sociétés d'État exemptées devraient être réexaminées en vue d'établir un cadre approprié de contrôle et de responsabilisation, semblable à celui de la Partie X;
- il faudrait cesser de présenter les crédits comme des recettes.



Chapitre 10 – Points saillants

10.1 Les objectifs de la politique sont poursuivis et les activités du gouvernement sont exécutées grâce à divers types d'organisations. Bien que le nombre d'entités aille en décroissant, la société d'État reste le type d'entité le plus important en dehors des ministères et des organismes. Chaque type d'organisation exige un niveau d'entité de contrôle et de responsabilisation; les sociétés d'État disposent d'un cadre établi à cette fin dans la Partie X de la *Loi sur la gestion des finances publiques*.

10.2 Le cadre défini dans la Partie X accorde aux sociétés d'État une certaine latitude, accompagnée de contrôles appropriés, et établit clairement les mécanismes nécessaires pour rendre les fonds de pouvoir comptables de la manière dont ils s'acquittent de leur responsabilité. Le cadre de contrôle et de responsabilisation constitue une assise législative solide qui, à notre avis, a donné de très bons résultats depuis son instauration il y a 11 ans. La situation actuelle est bien meilleure que celle qui prévalait avant l'introduction du cadre en 1984. Selon nous, les Canadiens sont généralement bien servis par ce cadre qui régit les activités des sociétés d'État.

10.3 Cependant, au cours du deuxième cycle d'examen spéciaux (un genre de vérification de l'optimisation des ressources), le Bureau a signalé au conseil d'administration de 80 p. 100 des sociétés actives au moins une lacune importante, le plus fréquemment dans les secteurs liés : 1) à la planification générale et stratégique et 2) à la mesure du rendement et à la communication des résultats. En fait, chaque société qui présentait une lacune importante, en avait une dans l'un ou l'autre de ces deux secteurs.

10.4 Dans certaines sociétés, la façon dont le mandat général est interprété ne permet pas toujours l'établissement d'objectifs mesurables. Dans d'autres, les données sur le rendement recueillies et communiquées ne sont pas suffisamment axées sur les résultats des programmes et des activités de la société. Ce n'est que dans quelques-unes seulement des sociétés examinées que les résultats réels ont été comparés à des cibles significatives. Il arrive souvent que l'information sur ce que font les sociétés soit fournie, mais que celle sur les résultats soit insuffisante. En conséquence, le gouvernement et le Parlement ne peuvent tenir les sociétés responsables de l'atteinte des résultats escomptés.

10.5 Le processus et la structure, appelés *intendance*, dont on se sert pour orienter et gérer les affaires de la société afin de relever sa valeur pour les Canadiens pourraient aider à traiter ces questions. L'intendance de la société d'État n'incombe pas seulement au conseil d'administration; il y faut aussi la participation active du gouvernement et du Parlement. Nous décrivons un certain nombre de mesures que pourraient prendre toutes les personnes qui ont une responsabilité d'intendance à l'égard de ces questions.

10.6 Lorsqu'ils ont répondu à notre sondage de février 1995, la majorité des présidents de conseil et des chefs de direction des sociétés d'État reconnaissaient que les examens spéciaux étaient à la fois nécessaires et utiles à la société, au gouvernement et au Parlement comme moyen d'évaluer l'information redondante. En préparant le troisième cycle d'examen spéciaux, nous prévoyons être plus efficaces et fournir une plus grande valeur à tous les responsables de l'intendance.



Chapitre 9 – Points saillants

9.1 Le gouvernement fédéral emprunte de l'argent et fait rapport de l'information à ce sujet depuis la Confédération. En qualité de vérificateurs, nous estimons que les données financières doivent être non seulement crédibles et compréhensibles, mais également utiles. Cela veut dire les mettre en contexte en les comparant à un quelconque point de référence pertinent, comme la taille de l'économie. À la lumière de cette comparaison, on constate que la dette fédérale de 1994-1995, qui s'établit à 546 milliards de dollars, s'élève à près de 75 p. 100 des revenus générés par les Canadiens l'an passé.

9.2 Toutefois, il est difficile de savoir si le fardeau de la dette est trop lourd, pas assez ou juste assez; c'est surtout affaire d'opinion. Pour se faire une idée, les Canadiens doivent comprendre que plus le fardeau de la dette est imposant, plus les frais d'intérêts s'élèvent et, par conséquent, moins il reste d'argent pour les besoins des programmes si l'on ne hausse pas les impôts.

9.3 Même s'il s'agit d'une situation désagréable, l'alternative, c'est-à-dire alléger le fardeau de la dette pour éviter les répercussions contraignantes des frais d'intérêts, notamment en haussant les impôts ou en réduisant les dépenses, n'est guère plus attrayante.

9.4 Jusqu'à maintenant, les discussions sur la politique fiscale se sont articulées autour de la réduction du déficit et de l'équilibre budgétaire. Elles n'ont pas été suffisamment axées sur la question plus générale de la taille du régime fiscal et du rôle du gouvernement. Nous sommes d'avis que le gouvernement devrait engager le Parlement à susciter cette vision.

9.5 Pour qu'un tel débat soit utile, le Parlement a besoin d'information qui l'aide à clarifier les choix. À notre avis, le gouvernement fédéral devrait fournir cette information à long terme dans le cadre du processus de consultation budgétaire de l'autome. Selon nous, les Canadiens pourront déterminer de quelle façon les budgets annuels s'inscrivent dans une vision à long terme de la dette supportable seulement lorsque le gouvernement se sera engagé à proposer une vision de la taille de la dette qu'il est prêt à assumer et qu'il aura façonné ses budgets en conséquence.

9.6 Nous concluons le chapitre en rappelant au Parlement et au public que notre propos concerne uniquement le gouvernement fédéral. En réalité, il y a trois paliers de gouvernement qui lèvent des impôts et qui empruntent en notre nom. Pour être en mesure de voir au-delà de chaque différent palier de gouvernement et de s'interroger sur la dette que les Canadiens peuvent assumer, il nous faut connaître la dette de tous les paliers de gouvernement au Canada. L'information dont nous disposons actuellement ne répond pas très bien à cette question. À notre avis, elle le devrait.

Dans le présent rapport et les rapports qui suivront, les chapitres seront reliés individuellement ou regroupés avec d'autres qui traitent d'un même sujet et qui sont susceptibles d'intéresser les mêmes lecteurs. En 1994, nous avons fait l'expérience des chapitres reliés séparément et nous avons constaté que nos lecteurs les trouvaient plus commodés à utiliser et que la recherche en était facilitée. En outre, cela nous permet de diffuser les chapitres en fonction des besoins précis des lecteurs. Nos rapports continueront d'être accessibles sur support électronique et sur Internet.

Je continuerai de publier dans le Rapport annuel, mon chapitre où je relève des questions d'une importance et d'un intérêt particuliers. En règle générale, le rapport annuel comprendra également les « Autres observations de vérification » et les résultats de nos suivis habituels sur les chapitres de vérification des années antérieures. Cependant, il pourra arriver qu'en raison du sujet ou du moment, il soit utile de publier ces résultats dans un rapport supplémentaire.

Après le premier cycle annuel de rapports, je consulterai les comités parlementaires et, au besoin, d'autres députés, pour déterminer si le calendrier des rapports est satisfaisant ou s'il y a place à amélioration. Nous examinerons également l'incidence du calendrier sur les activités des ministères.

Nous voulons avant tout servir le Parlement avec promptitude et lui offrir les services les plus appropriés possible. Les modifications apportées à la *Loi sur le vérificateur général* nous ont rapprochés de ce but.



Avant-propos

En juin 1994, la *Loi sur le vérificateur général* a été modifiée pour permettre chaque année le dépôt d'un rapport annuel, de trois rapports supplémentaires au maximum et de rapports spéciaux sur toute affaire importante ou urgente.

Cette modification permet au Bureau du vérificateur général d'améliorer ses services au Parlement. Lorsque le Bureau était restreint à un rapport annuel, les députés avaient parfois à étudier des questions qui étaient déjà désuètes. L'autorisation de déposer jusqu'à trois rapports supplémentaires par an nous permettra de fournir de l'information plus actuelle et plus pertinente sur les résultats de nos travaux.

Puisque le Parlement sera en mesure d'étudier sans tarder les résultats de nos vérifications, des mesures correctives pourront être prises plus rapidement, ce qui pourra se traduire par des économies pour le contribuable. En raison de l'urgence de réduire les déficits et la dette publique, il est important pour le gouvernement et le Parlement d'être en mesure de démontrer qu'ils profitent rapidement des possibilités d'épargne cernées.

Je suis heureux de déposer notre deuxième rapport supplémentaire. Outre l'avant-propos et les points saillants qui suivent, le Rapport comprend huit chapitres :

- Information destinée au Parlement – Les déficits et la dette : Pour comprendre les choix
 - Sociétés d'État : S'acquitter des responsabilités en matière d'intendance
 - Les systèmes de gestion de l'environnement : Une approche fondée sur des principes
 - Les systèmes en développement : Gérer les risques
 - Agence canadienne de développement international : Suivi échelonné du Rapport du vérificateur général de 1993 – Phase I
 - Industrie Canada : Programmes d'assistance aux entreprises – Transition
 - Travaux publics et Services gouvernementaux Canada : Le projet de raccourcissement dans le détroit de Northumberland
 - Revenu Canada : Taxe de transport aérien
- Cette année, en plus de ce rapport d'octobre et de celui que nous avons publié au mois de mai, nous publierons notre rapport annuel, comme d'habitude, à la fin de novembre. Au cours des prochaines années, nous comptons déposer, outre le rapport annuel, au plus trois rapports (mais pas nécessairement ce nombre).

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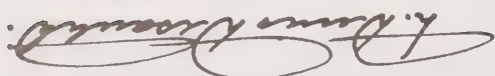
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Avant-propos et Points saillants

OTTAWA, le 5 octobre 1995

L. Denis Desautels, FCA



Le vérificateur général du Canada,

J'ai l'honneur de vous transmettre ci-joint mon deuxième rapport de 1995 à la Chambre des communes, lequel doit être déposé à la Chambre en conformité avec les dispositions du paragraphe 7(5) de la Loi sur le vérificateur général.

À l'honorable Président de la Chambre des communes :

AUDITOR GENERAL OF CANADA



VÉRIFICATEUR GÉNÉRAL DU CANADA

Le Rapport d'octobre 1995 comporte 8 chapitres ainsi qu'un Avant-propos et Points saillants. Pour mieux répondre aux besoins de nos clients, il est disponible sur divers supports. Pour obtenir d'autres documents ou les obtenir sur un autre support, voir la Table des matières et le bon de commande à la fin du présent document.

Dans le présent rapport, le genre masculin est utilisé sans aucune discrimination et uniquement dans le but d'alléger le texte.

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Vérificateur général
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à la Chambre des communes
Avant-propos et Points saillants

Octobre 1995

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AI
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Report of the
Auditor General
of Canada
to the House of Commons

Chapter 9
Information for Parliament – Deficits and Debt:
Understanding the Choices

October 1995

**Report of the
Auditor General
of Canada
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Chapter 9
Information for Parliament – Deficits and Debt:
Understanding the Choices



October 1995

This October 1995 Report comprises 8 chapters and a Foreword and Main Points. In order to better meet clients' needs, the Report is available in a variety of formats. If you wish to obtain another format or other material, the Table of Contents and the order form are found at the end of this chapter.

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Information for Parliament

Deficits and Debt: Understanding
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Assistant Auditor General: Ron Thompson
Responsible Auditor: Jeff Greenberg

Information for Parliament

Deficits and Debt: Understanding the Choices

Main Points

9.1 The federal government has been borrowing money and reporting that information since Confederation. As auditors, we believe that those financial numbers should not only be credible and understandable, but also useful. This means putting them into context by comparing the debt to some relevant reference point like the size of the economy. Doing that shows that for 1994–95, the federal debt of \$546 billion amounts to close to three quarters of the income generated by Canadians last year.

9.2 It is difficult to know, however, whether this debt burden is too high, too low or just right; that is largely a matter of opinion. In forming that opinion, Canadians need to understand that the larger the debt burden becomes, the greater the weight of interest charges and therefore the less available for program needs, without resorting to higher taxes.

9.3 While this is an uncomfortable situation, the alternative of reducing the debt burden to avoid the constraining effect of interest charges, namely through higher taxes and/or reduced spending, is also uncomfortable.

9.4 To date, discussions about fiscal policy have focussed on deficit reduction and balanced budgets. They have not given enough consideration to the larger question of how much debt we can sustain over the long haul, and how that fits within our view of taxation and the role of government. We believe that the government should engage Parliament in developing this vision.

9.5 For such a debate to be meaningful, Parliament needs information to help clarify the choices. We believe that the federal government ought to provide that longer-term information as part of the fall budget consultation process. In our view, only when government is committed to a vision about how much debt it is prepared to carry, and crafts budgets with that in mind, will it be possible for Canadians to assess how annual budgets fit into a longer-term vision for sustainable debt.

9.6 We conclude the chapter by reminding Parliament and the public that we have been speaking only about the federal government. The reality is that there are three levels of government taxing us and borrowing on our behalf. If we are ever to look beyond each jurisdiction in isolation and ask the question how much debt can Canadians carry, we need to know how much debt is owed by all levels of government in Canada. Information currently available doesn't answer that question very well. We believe that it should.

Note to Reader

In this chapter, all deficit and debt numbers, except for 1994-95, are taken from the Financial Statements that appear either in the *Public Accounts* or in the *Annual Financial Report of the Government of Canada*. Because those 1994-95 numbers were not available at the time of printing, we used the deficit and debt forecasts that appeared in the *Budget Plan* tabled in the House of Commons by the Minister of Finance, 27 February 1995.

Introduction

9.7 The federal government has been borrowing money since Confederation. Many of the major capital developments that form part of the backbone of this country were financed in this way. They included railways, ports, the St. Lawrence Seaway, the Trans-Canada pipeline and others. In the 128 years since Confederation, only once has Canada accumulated a debt burden (the ratio of debt to GDP) equal to or greater than today, and that was during the Second World War. But that was a special case.

9.8 After the war, the government, through significant war-related expenditure reductions, was able to catch hold of a “virtuous circle” created by unprecedented growth and low interest rates that brought us from a debt burden of over 100 percent of Gross Domestic Product (GDP) at the end of the war to 19 percent by 1975. Since then, through a combination of fiscal policies and economic conditions, the virtuous circle has become a vicious circle with the federal debt rising to where it now is at 73 percent of GDP.

The Role of the Auditor General in Deficits and Debt

9.9 The Auditor General’s responsibilities include an annual audit of the government’s summary financial statements. In conducting this audit, we are concerned not only with the credibility and understandability of the numbers, but also with their usefulness so that Canadians can understand what the figures mean.

9.10 In that context, absolute values for the deficit like \$38 billion or for the debt of \$546 billion simply do not help Canadians understand the significance or

relevance of these huge sums.

Alternatively, converting these large numbers into ratios like a debt-to-GDP ratio today of 73 percent, as compared to 19 percent 20 years ago, and 50 percent 10 years ago, creates information that will be more understandable and useful not only for Parliament, but for all Canadians.

9.11 Helping Parliament use information from the financial statements in this way is a responsibility that we believe flows naturally from the audit process. In this context, we have made it a regular practice to return to this theme of more useful information about deficits and debt.

9.12 Two years ago, we published a chapter on deficits and debt with the theme of better information. We indicated that the government should be more transparent about its financial condition by providing indicators that clarify the numbers appearing in its financial statements by converting them to ratios. We also felt that this kind of information should be included in a concise annual financial report along with a scorecard comparing how government finances measured up against benchmarks set down in the budget.

9.13 We are happy to report that the government has begun to do these things, beginning last fall with its first Annual Financial Report. We are also pleased that the government has opened up the budget consultation process, which many Canadians have been calling for, to allow Parliament and the public more say in the process leading to the annual budget.

The Purpose of the Chapter

9.14 In this chapter we continue the theme of better information and the need for helpful indicators about deficits and debt that we began two years ago. More specifically, we hope to encourage the

In the 128 years since Confederation, only once has the federal government accumulated a debt burden equal to or greater than today, and that was during the Second World War. But that was a special case.

There is a momentum to debt that makes it increasingly more costly to control the larger it becomes, and consequently more difficult to rein in through just one or two budgets.

government to provide financial information that not only furthers understanding but also clarifies choices.

9.15 We are convinced that Parliament and the public need information to help them understand fully the stark reality that there is a momentum to debt that makes it increasingly more costly to control the larger it becomes, and consequently more difficult to rein in through just one or two budgets.

9.16 We are also worried that many Canadians have been preoccupied with deficit reduction without putting it in the context of a long-term goal of the amount of debt we can afford to carry that is consistent with our views about taxation and the size and role of government.

9.17 Our concerns are not related to the events of any single year or the decisions of any single budget. Nor are they related to any particular program or tax. Rather they are related to the capacity of the government to carry the debt incurred by successive governments over many years.

9.18 Through this chapter, we hope to persuade government and Parliament that there is a need for a consensus on where they believe the country should be going with debt, so that when Canadians see the difficult budgets that lie ahead, they will understand how those annual plans fit into a longer-term strategy for controlling our indebtedness.

Observations

The Sustainability of Debt

Defining sustainability of debt

9.19 Regardless of the views people have about the role and size of government, most would agree that debt

should be managed in a way that is sustainable. A recent *Bank of Canada Review* article and the February 1995 Budget indicated that for public finances to be on a sustainable path, the government's debt ought not to rise relative to the capacity of the economy to support it. In other words, sustainability is a measure of the ability of the government to maintain the current course of fiscal policy. This includes meeting creditor requirements and current program commitments within the current tax regime, without the debt burden rising.

9.20 A conventional way of assessing the consequences of debt is to consider the implications of maintaining a stable debt-to-GDP ratio, not necessarily in just one or two years, but over a protracted period. This means that the government needs to examine the annual fiscal policy options and the associated program choices that would stabilize the debt-to-GDP ratio. It also needs to examine the implications of those choices for the economy and society.

9.21 This is not to say that there is any "right" or optimal debt-to-GDP ratio. We have seen debt-to-GDP ratios in Canada range from as low as 19 percent to as high as over 100 percent. Naturally, as the ratio rises, the financial and non-financial costs of stabilizing it also grow. On the financial side, these costs come in the form of cutbacks in expenditures on the programs Canadians have come to expect, or through increases in taxes. On the non-financial side, they come in the form of their impact on those who will have to bear the brunt of reduced spending or increased taxes, not only in the short term but in the longer term where the effects of many of these choices become more evident.

9.22 The current government has already made some pronouncements about

deficit control, and the sustainability of debt. In its “Red Book”, *Creating Opportunity*, the current government indicated that “Any responsible government must have as a goal the elimination of the deficit.” It also indicated that “...we cannot ...eliminate the deficit overnight. The immediate goal ... will be to reduce the deficit as a percentage of GDP ... to 3 percent.”

9.23 In the 1995 Budget, the government went one step further by indicating that “By 1996–97, the Canadian economy will finally be growing faster than the debt, and the debt-to-GDP ratio will begin to decline. The ratio will continue to fall after that in response to the permanent spending reductions in the Budget.”

Sustainability and fiscal choices

9.24 If we accept that a sustainable fiscal policy is one that at least stabilizes the debt-to-GDP ratio over time, then the question is, what would it take in terms of program spending and revenues to make this happen? If the ratio is to be stable, then both the numerator and the denominator must grow at the same rate. The numerator — the growth in debt — is determined by the size of the annual deficit, which is the difference between revenues and expenditures. Expenditures, in turn, can be divided into interest charges on the debt itself and program expenditures. (Exhibit 9.1 provides an illustration of this relationship.)

9.25 Economists have developed a tool that provides a simple and highly aggregate way of comparing factors under a government’s direct control — spending and revenues — with those outside its direct control — interest rates and economic growth. The tool focusses on the size of the operating balance (the difference between revenues and program

spending) that would stabilize the debt-to-GDP ratio based on the gap between interest rates and the growth in GDP. (See Exhibit 9.2 for a description of this tool.)

9.26 This relationship illustrates the cold reality that as long as interest rates on the debt exceed the rate of economic growth, we will need to run an operating surplus in order to prevent the debt-to-GDP ratio from rising. Furthermore, when interest rates are rising and economic growth is slowing down, interest costs will also rise, as will the debt-to-GDP ratio. The only way to stop the ratio from rising is through reduced spending or increased taxes, or a combination of the two.

9.27 Alternatively, if the economy is booming and interest rates are relatively low, then it should be possible to meet the interest costs on the debt while continuing to spend, and still meet a deficit target that will leave the debt-to-GDP ratio stabilized, or even falling.

Suppose that the GDP for a country grows at an annual rate of 5 percent. Then if the public debt-to-GDP ratio is to be stabilized, the debt must be constrained to growth at a rate no faster than this. This implies that the annual deficit must be held to no more than 5 percent of the outstanding debt.

But if interest rates were higher than 5 percent, the interest charges alone would exceed 5 percent of the debt. This would mean that the government must run a surplus between revenues and program spending (the operating balance) in order to stabilize the debt-to-GDP ratio. In other words, when the interest rate exceeds the rate of growth in the economy, sustainability requires that revenues exceed program expenditures. And given the size of the gap between interest rates and growth, the size of the operating surplus required will depend on the size of the existing debt-to-GDP ratio; the higher the debt-to-GDP ratio, the bigger the operating surplus needed to stabilize it.

When the interest rate exceeds the rate of growth in the economy, stabilizing the debt-to-GDP ratio requires that revenues exceed program expenditures.

The higher the debt-to-GDP ratio, the bigger the operating surplus needed to stabilize it.

Exhibit 9.1

An Illustration of Sustainability and Fiscal Choices

9.28 To illustrate this, in the last Budget, the government projected its deficit, debt and operating balance for 1995–96, on the assumption that the economy would grow approximately 3.5 percent slower than interest rates. This gap implies that the government would need an operating balance to GDP of approximately 2.6 percent to stabilize the debt-to-GDP ratio at its current level of 73 percent. This works out to an operating surplus of about \$19 billion for 1995–96. (See Exhibit 9.2 for these calculations.)

9.29 For the 1996–97 year, the government projected interest rates to be about 4 percent higher than economic growth. With this gap, the government would need an operating balance of \$23 billion to keep the debt-to-GDP ratio at or near 73 percent.

9.30 But in fact, the government has projected the operating balance to be near \$29 billion for that year. This means that

government expects the debt-to-GDP ratio to begin to decline.

9.31 This is arithmetic though, and we cannot expect interest rates, economic growth, and those factors that affect spending and revenues to behave so mechanistically or predictably. And because they don't, it means that there is uncertainty and risk to every budgetary decision.

The uncertainty of interest rates and economic growth

9.32 In our 1993 chapter, we pointed out the significance of interest rates on debt accumulation. We illustrated the perniciousness of compound interest rates and how, once debt begins to accumulate, governments can get caught in a vicious circle.

9.33 To illustrate this, we can look back over 40 years and divide that period into two segments. From the mid-1950s to

Exhibit 9.2

A Technical Tool for Analyzing Sustainability and Fiscal Choices

The debt burden stabilizes when

$$\text{Operating Balance/GDP} = (i-g) \times \text{Debt/GDP}$$

where

- the operating balance is the difference between tax revenues and program spending;
- “i” represents interest rates on the debt; and
- “g” represents the nominal growth in GDP.

This equation can be used to calculate the operating balance that would be consistent with a particular assumption for the interest costs on the debt, and a value for the deficit that would be consistent with the debt growing at the same rate as GDP.

For example, if:

$$i = 9\%$$

$$g = 5.5\%$$

$$\text{Debt-to-GDP} = 73\% \text{ and}$$

$$\text{GDP} = \$750 \text{ billion}$$

and these values are inserted into the above equation:

$$\text{Operating Balance/GDP} = (.09 - .055) \times .73$$

then the:

$$\text{operating balance/GDP} = 2.6\% \text{ and}$$

$$\text{operating balance} = .026 \times 750 = \$19 \text{ billion.}$$

(For a further explanation of this, see *A New Framework for Economic Policy* tabled last fall as part of the budget consultation process.)

mid-1970s, Canada was in a virtuous circle with interest rates so low relative to the growth in the economy, and to the growth in revenues, that with small operating surpluses and occasional deficits, the debt-to-GDP ratio declined to 19 percent by 1975. Since 1975, and particularly after 1980, interest rates have risen, and have remained consistently higher than the growth in the economy. Exhibit 9.3 illustrates the change in the spread between interest rates and economic growth over this 40-year period.

9.34 This structural change was simply not foreseen by most observers; it takes a long time to determine for certain whether changes in interest rates and economic growth are an aberration or a new trend. However, the impact on the

debt burden of not foreseeing a new trend can be enormous.

The Last Twenty Years: A Period of Rising Debt

1976–1982

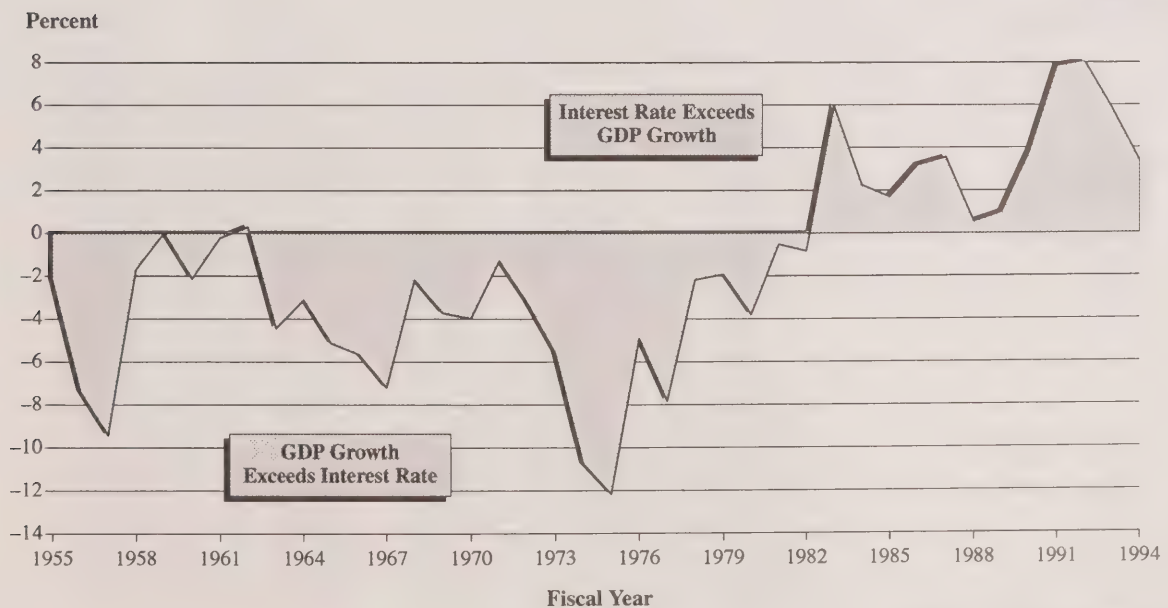
9.35 In retrospect, 1975–76 was a watershed year for fiscal policy; in that year the deficit almost tripled from \$2.2 billion to \$6.2 billion. In the May 1976 Budget, the Minister of Finance acknowledged this sudden fiscal deterioration in the following terms:

The deficits of both the federal government and the provincial governments reached record levels in 1975. ...this was entirely appropriate, and made a major contribution to protecting Canadians against the full force of the world recession. But now

It takes a long time to determine for certain whether changes in interest rates and economic growth are an aberration or a new trend; however, the impact on the debt burden of not foreseeing a new trend can be enormous.

Exhibit 9.3

Difference between Average Interest Rate on
Federal Public Debt and GDP Growth



Source: Public Accounts of Canada
CANSIM, Statistics Canada

From the mid-1970s to today, deficit-reduction plans have appeared in virtually every budget, yet events have never unfolded as planned.

that the recovery is well established and private spending is rising, it is equally appropriate that these record deficits should recede.

9.36 In fact, however, in 1976–77, the federal deficit rose to \$6.9 billion, and five years after that it had more than doubled to \$15.7 billion. In the same five years, the debt-to-GDP ratio had risen from 21 percent to 30 percent.

9.37 The era of establishing fiscal policies that essentially balanced budgets over a business cycle and contributed to a debt burden falling from the end of World War II to the mid-1970s was over. From the mid-1970s to today, deficit reduction plans have appeared in virtually every budget, yet events have never unfolded as planned.

1982–1986

9.38 In his November 1981 Budget, the Minister of Finance gave top billing to this theme. He indicated that there was:

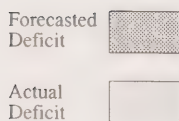
...the need for restraint on the part of the government and restraint on the part of all Canadians. For our part, I believe we must reduce our deficit and our borrowing requirements substantially — even more than I proposed a year ago. This will take pressures off credit markets, ease interest rates and provide room for needy borrowers.

9.39 Exhibit 9.4 provides a scorecard of the actual outcome for the deficit as compared to budget predictions.

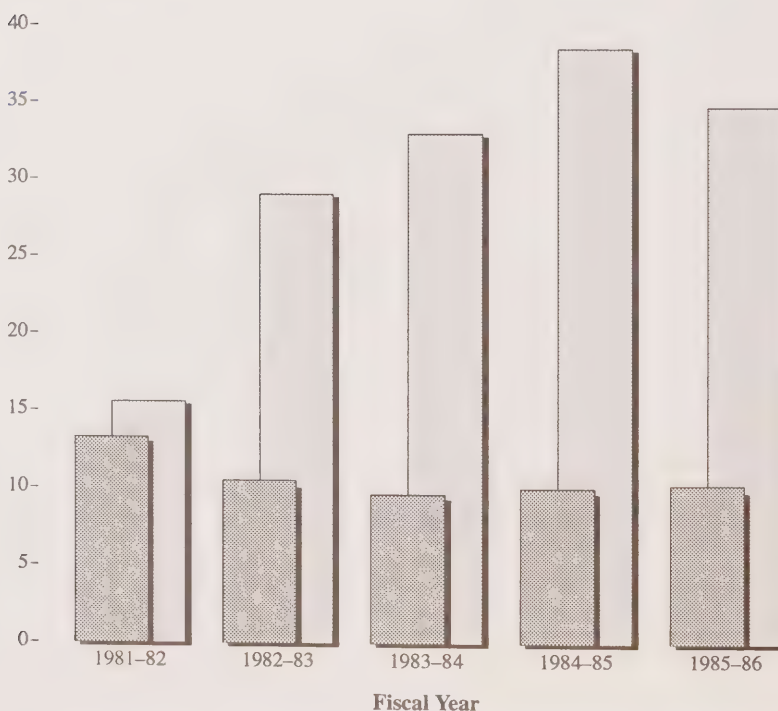
9.40 Over the same period, while the deficit continued to climb, the

Exhibit 9.4

Federal Budget 1981
Deficit Forecasts and Actual
Values



Billions of Dollars



Source: Department of Finance

debt-to-GDP ratio rose from 30 percent to 50 percent.

1986–1991

9.41 A few years later, a new government and a new Minister of Finance noted with alarm the run-up of public debt, which had increased some tenfold in less than two decades, and with it, spiralling interest charges. They expressed renewed resolve and announced plans to bring the growing debt and deficits under control. In the May 1985 Budget, the Minister made the following statement:

...If we do not show the resolve to deal with this problem, the result will be paralysis of the Government of Canada. ... If we fail to act now and maintain our present borrowing pattern, annual interest charges at the end of the decade could approach \$50 billion. Where would we get the money? Ultimately, we would be

forced to find the money through drastic cuts in government services and major tax increases. Many government programs would be in jeopardy.

9.42 The Minister subsequently announced a series of expenditure cuts and tax increases designed to bring about a reduction in the deficit over the medium term in accordance with the figures shown in Exhibit 9.5.

1991–1995

9.43 As Exhibit 9.5 shows, the deficit track announced in the May 1985 Budget was more or less attained, thanks in large measure to strong and sustained economic growth throughout the late 1980s. Even so, with a deficit still in the range of \$30 billion, it could not be said that our deficit and debt problems were behind us. Indeed, a \$30 billion deficit meant that our debt-to-GDP ratio was still rising. The government was well aware of the dangers

Billions of Dollars

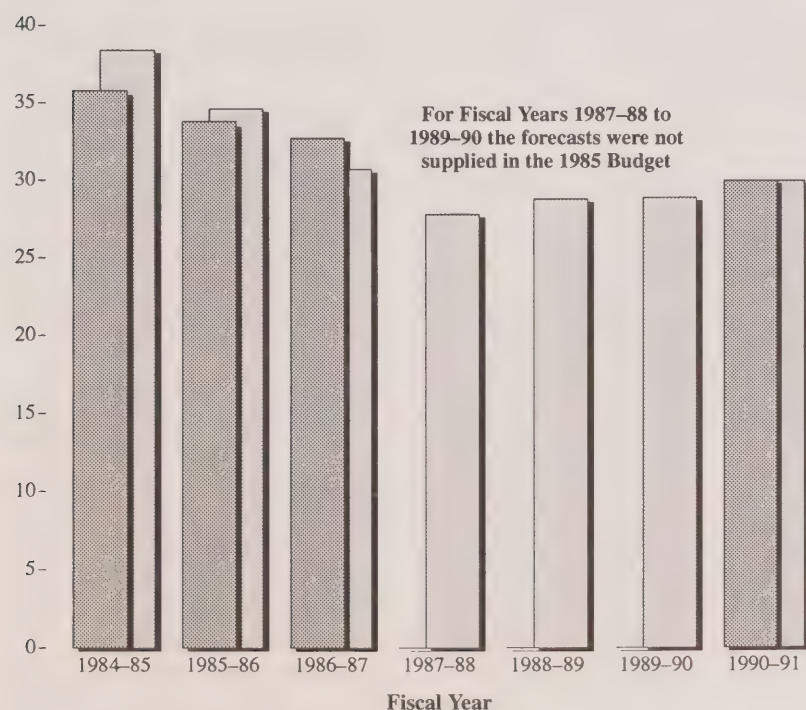


Exhibit 9.5

Federal Budget 1985
Deficit Forecasts and
Actual Values

Forecasted Deficit
Actual Deficit

Source: Department of Finance

that such a trend implied. In his February 1990 Budget, the Minister of Finance said:

A public debt growing faster than the national income does more than feed on itself. It consumes more and more of the dollars we need to maintain existing programs, meet new priorities and keep taxes down. Ultimately, it consumes the hope and the opportunity that should be the legacy we pass on to our children. Instead, a runaway debt becomes our legacy.

9.44 The Minister accordingly reaffirmed the government's commitment to further deficit reduction. Unfortunately, the ensuing recession in the early 1990s dramatically upset his plans, as Exhibit 9.6 indicates.

The Impact of the Past

9.45 As this brief history makes clear, the huge run-up of public debt over the

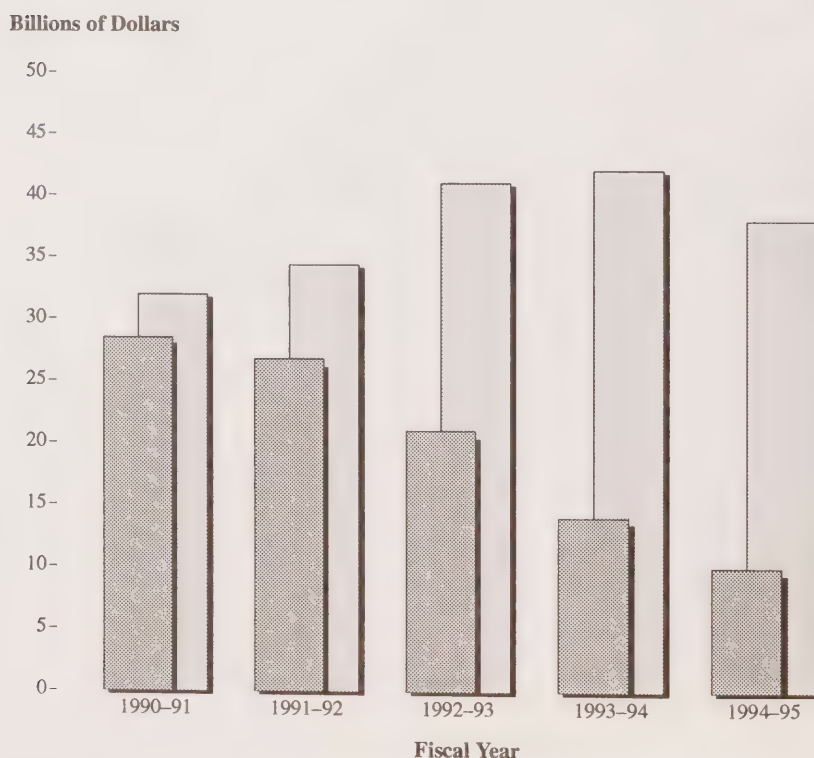
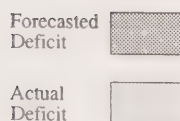
past two decades was neither foreseen nor desired by those in charge of our public finances. Successive governments and finance ministers since the mid-1970s have consistently spoken of the threats posed by a soaring public debt and the need to bring it down. Nevertheless, our public debt kept rising steadily.

9.46 How did this happen? The short answer is that the fiscal policy actions were designed to deal with an economy that never materialized; actual economic events proved more constraining than was anticipated. Economic growth since the mid-1970s averaged less than 3 percent compared to 5 percent over the previous 20 years, while real interest rates, close to 2 percent in the earlier period, averaged close to 4 percent after 1975.

9.47 As explained earlier, this reversal of good economic fortune implied that we ought to have been running substantial operating surpluses to stabilize the debt

Exhibit 9.6

Federal Budget 1990 Deficit Forecasts and Actual Values



Source: Department of Finance

burden. Instead, we recorded operating deficits over most of the last 20 years.

9.48 In addition to not foreseeing the permanency of the reversal in economic fortunes, as Irwin Gillespie points out in his 1991 book *Tax, Borrow and Spend*, there also may not have been the will:

Widespread political agreement [on expenditure reduction].... may be a factor explaining why sustained debt reduction has only occurred in the aftermath of war. There may be other times in Canada's fiscal history when a strong voter demand for deficit reduction existed, accompanied, however, by little or no agreement as to how the costs should be distributed. ...It may be remarked that lack of such political agreement seems to be restraining the finance ministers of the 1980s and 1990s from reducing the annual amount of deficit financing, much less reducing the size of the debt.

Interest rates and today's choices

9.49 A way of assessing the past is to illustrate the role that the sustained rise in interest rates has played, not only in increasing the cost of stabilizing the debt burden, but in increasing the cost of delay. To do that, we looked at the impact on today's deficit, debt and operating balance using the assumption that real interest rates over the last 20 years had remained at the same level as they were for the 20 previous years.

9.50 For this exercise, we took actual values for spending, revenues, inflation and growth, and recalculated the deficit, debt and operating surplus as if real interest rates had averaged around 2 percent as they had done from the mid-1950s to the mid-1970s.

9.51 Our results show that the 1994-95 deficit would have been

\$25 billion as compared to \$38 billion; the debt would have been \$387 billion as opposed to \$546 billion; the debt-to-GDP ratio would have been 52 percent versus 73 percent; and because interest rates would have been lower than economic growth, there would be no need for an operating surplus to sustain the debt-to-GDP ratio.

9.52 This analysis, while only arithmetic, does illustrate the high cost of controlling a debt when interest rates are high relative to the cost had they been lower. The reality is that they are not lower, and had it been a simple matter of making them lower in the 1980s and 1990s as they were in the previous 20 years, governments would have undoubtedly done so. But economic forces, both domestic and international, made this impossible. The result is a debt burden of 73 percent of GDP and a required operating surplus of \$19 billion simply to sustain it.

9.53 The point is that spending and revenue decisions that make up the operating balance are more difficult to make when interest rates are high than when they are low. But putting off those decisions only raises the stakes.

Rising debt and today's choices

9.54 Another way of looking at the impact of the past is to estimate the operating balance that would be needed in 1995-96 had various ministers of Finance been able to stabilize the debt-to-GDP ratio at the level they were facing in selected past years.

9.55 For example, we noted earlier that we would need an operating balance of about \$19 billion to stabilize the debt-to-GDP ratio near 73 percent in 1995-96. If we had stabilized it where it was in 1985-86 near 50 percent, we would need an operating balance today of

Spending and revenue decisions are more difficult to make when interest rates are high than when they are low. But putting off those decisions only raises the stakes.

\$13.5 billion to maintain it, leaving a savings of more than the budget of the entire Foreign Affairs, International Trade and Assistance sector. Alternatively, if we had stabilized it at the 1979–80 level of approximately 28 percent, we would need an operating balance today of only \$7.5 billion, which would be a savings equivalent to the entire Defence sector.

Government deficits and debt have a significant effect on our international financial affairs, and they in turn have an effect on the government's fiscal position.

9.56 Our purpose in bringing out these differences is not to criticize past decisions, but to highlight the fact that for a variety of reasons, ranging from unanticipated economic events to lack of agreement among Canadians about spending and revenue choices, the policies made did not generate the operating balances necessary to stabilize the debt burden. The difficulty this creates is that unless the debt burden is stabilized, interest costs grow and consume a greater proportion of revenues, leaving a shrinking balance to be spent on programs in the future.

9.57 Putting this another way, in the early years when the debt-to-GDP ratio was relatively low, not only did we need relatively small operating balances to stabilize it, but the cost of not doing so was also low. Today when the debt-to-GDP ratio is four times higher than it was 20 years ago, the cost of stabilizing it is significantly higher, as is the cost of letting it continue to rise. In short, the choices available to us have become much more painful.

Current Account, Balance of Payments and the Sustainability of Public Finances

The current account and the balance of payments

9.58 The discussion so far has not made any reference to Canada's external

financial position: it has proceeded as if Canada were insulated from the rest of the world. The reality is that we have an open economy, with a large trading sector and financial markets that are fully integrated with the global economy. Government deficits and debt have a significant effect on our international financial affairs, and they in turn have an effect on the government's fiscal position.

9.59 When governments run deficits, they draw money away that could be used for private investments in Canada. In order for a country to invest in its future, it is necessary for someone, somewhere, to save. Usually households save more than they invest, and they lend their excess savings to other sectors. Enterprises, on the other hand, invest more than they save and so tend to be borrowers. In the case of the federal and provincial governments, they also tend to be borrowers. But in recent years, their borrowing requirements have increased considerably. The result is that as a country our borrowing has exceeded our saving such that we have had to turn to foreign lenders to make up this difference.

9.60 This foreign borrowing for all sectors of the Canadian economy is reflected in deficits in the current account of Canada's balance of payments. This current account tracks Canadian payments to foreigners and foreign payments to Canadians for goods, services, and the use of financial capital. This means that when we buy more goods and services from abroad than we sell, we increase the current account deficit; when we spend more on travel abroad than visitors do in Canada, we increase the current account deficit; and when we make payments abroad on outstanding debt that exceed the payments we receive for our investments abroad, that too increases our current account deficit.

9.61 In the first half of the 1990s, the current account deficit averaged \$26 billion annually, or nearly 4 percent of GDP compared to an average of less than 1.5 percent over the previous 20 years. Among the 25 member countries of the Organization for Economic Cooperation and Development (OECD), only Australia and Mexico had deficits in their current accounts that exceeded Canada's over this period.

The current account and foreign borrowing

9.62 As a result of these large current account deficits, Canada as a whole has added \$117 billion to its already high net foreign debt since 1989, bringing it to a total of \$342 billion at the end of last year. As a proportion of GDP, our net foreign debt jumped from 35 percent in 1989 to 46 percent in 1994. According to the OECD, Canada's net foreign indebtedness today is by far the highest among the major industrialized countries. Italy, the next most heavily indebted country among the G-7 countries, has a foreign debt-to-GDP ratio of less than 12 percent.

9.63 This sharp growth in Canada's external debt in recent years, together with a rise in real interest rates over this period, has resulted in rapidly growing debt service payments that leave the country. Over the past decade, net payments to foreign creditors have doubled to \$32 billion today. This shortfall now exceeds the current account deficit. Had we been able to offset this with trade surpluses in goods and services, our foreign debt would not have continued to grow. But because we did not, the resulting deficit has been added to our foreign debt, which has increased debt service payments in succeeding years, and so created a vicious circle of rising foreign deficits and debts.

Foreign borrowing and standard of living

9.64 Foreign borrowing, like borrowing generally, is not necessarily bad in itself; it all depends on what you do with it. When Canadians, in both the private and public sectors, borrow for productive investment purposes, that kind of borrowing raises our income and our overall standard of living. But when we borrow for consumption, the subsequent debt service payments have to come from income that is not growing. In short, because we have not augmented our productive capacity, interest payments that leave the country crowd out consumption and our standard of living falls.

9.65 The foreign debt Canadians incurred in recent years belongs mostly in the latter category. As Exhibit 9.7 shows, the years of heaviest foreign borrowing, 1989–94, coincided with a period of historically low investment spending. In other words, our borrowing in recent years has been used primarily to fund consumption rather than investment.

9.66 A significant contributor to foreign borrowing for consumption has been the government sector. Over the same five-year period, while governments increased their borrowing, their investment spending, after the effects of inflation have been removed, remained basically static. At the federal level alone, investments as a proportion of total spending declined to around 1.5 percent over the past decade as compared to near 4 percent through the 1950s and 1960s.

Current account deficits and the sustainability of debt

9.67 As our foreign-held debt rises, foreign creditors need to be persuaded to increase their holdings of Canadian debt, at the expense of holdings of debt from other countries. This means either

Canada's net foreign indebtedness today is by far the highest among the major industrialized countries.

Over the past decade, when Canada's international indebtedness rose, Canadian real interest rates also rose, not only relative to previous rates in Canada, but also to those in the United States.

convincing creditors that Canadian debt is less risky or paying a premium for crowding out other instruments.

9.68 In the extreme, of course, lenders may refuse any country credit, except on prohibitive terms. But typically, much before that, borrowers' interest rates begin to rise. Only when a country's indebtedness reaches proportions that raise serious doubts about its ability or willingness to service that debt would credit be withheld. At what level that would be is pure speculation.

9.69 While interest rates are affected by many factors, we know that over the past decade, when Canada's international indebtedness rose, Canadian real interest rates also rose, not only relative to previous rates in Canada, but also to those in the United States. Exhibit 9.8 illustrates

the spreads between Canadian and U.S. long- and short-term rates over this period.

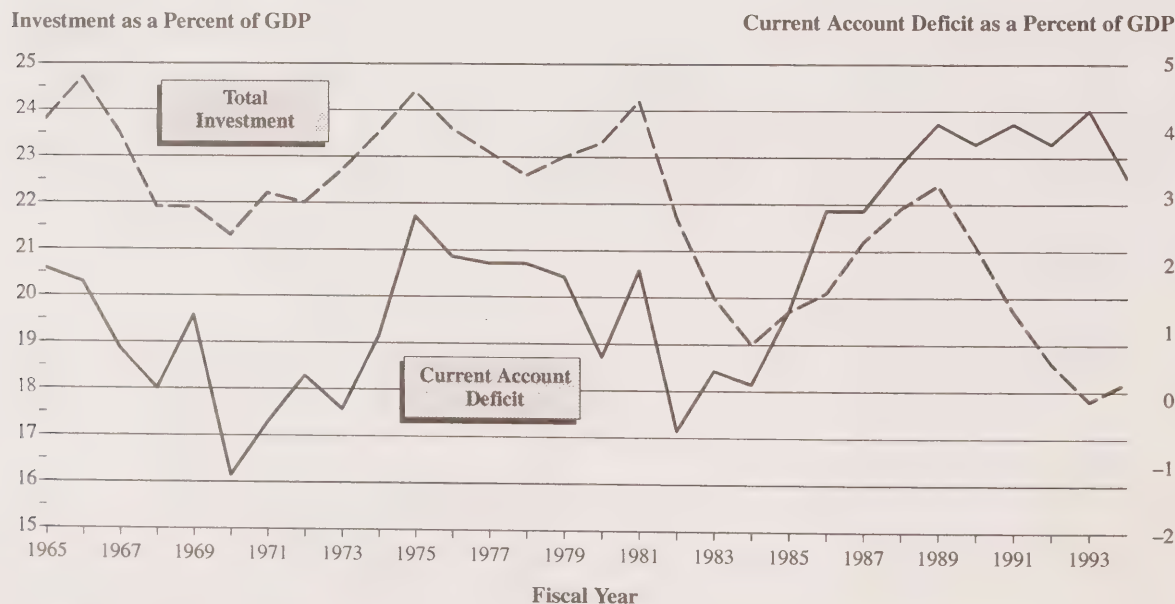
9.70 Higher interest rates of course make it more difficult for governments to stabilize their debt-to-GDP ratios, let alone reduce them. The growth of Canada's international indebtedness has no doubt been a factor contributing to those rates.

Sustainability and the Long Term

9.71 To this point, we have illustrated that the higher the debt burden, the greater the cost of stabilizing it. We have also shown that there are factors outside the direct control of the government that can create obstacles to stabilizing and reducing this burden. The economy, both domestic and international, can play havoc with the best of plans; and the impact on the Canadians who bear the

Exhibit 9.7

Domestic Investment and Foreign Borrowing
(as a percent of GDP)



Source: CANSIM, Statistics Canada

burden of program reductions can make it difficult for a government to stay the course.

Reducing the debt burden

9.72 Equally difficult to accept is the cost that Canadians have to bear to reduce the debt burden and why that is important. The 1995 Budget indicated that by 1996–97, with a 3 percent deficit-to-GDP ratio, the debt-to-GDP ratio will begin to recede. This happens because that deficit, in combination with interest rates, will generate an operating surplus of \$29 billion. However, if the government were content simply to stabilize the debt-to-GDP ratio at a level of 73 percent in 1996–97, this would require an operating surplus of only about \$23 billion.

9.73 Over the last decade the spread between interest rates and economic

growth has averaged over 3.5 percent. Assuming this spread prevails over the coming decade, and the government wished to maintain the debt-to-GDP ratio at its current level, it would have to run an average operating surplus of slightly over 2.5 percent of GDP.

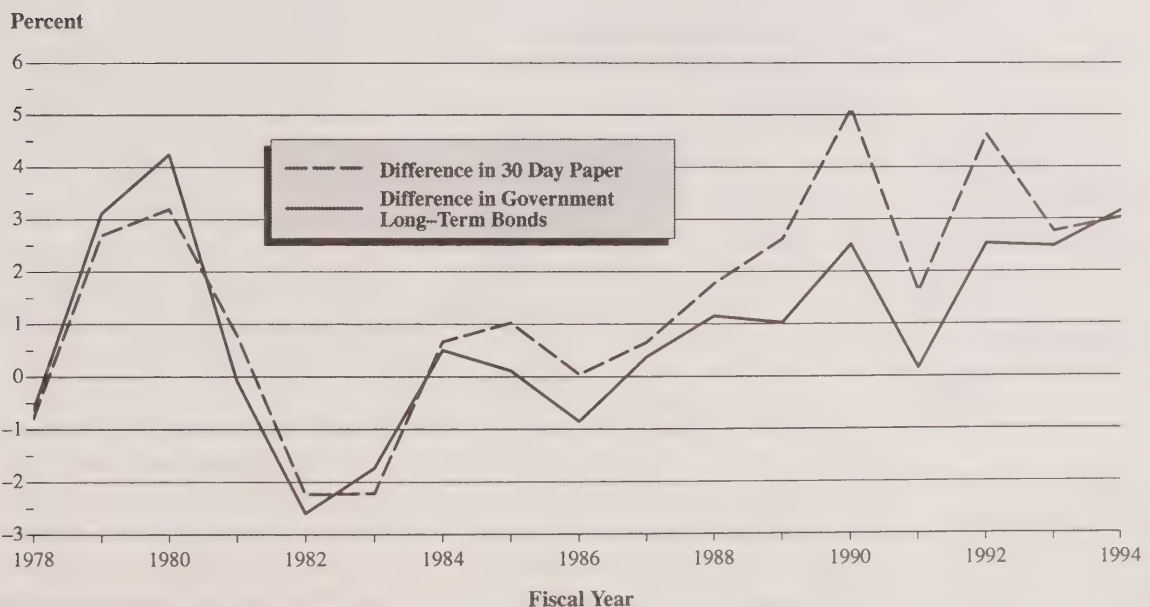
9.74 Ten years ago, the debt-to-GDP ratio was approximately 50 percent. Now, for example, if the government were to set a policy to restore the debt burden by 2006 to what it was 10 years ago, it would need operating surpluses relative to GDP over the next 10 years to average just under 5 percent. Translated into actual dollars, this would amount to close to \$60 billion by the year 2006, assuming the economy continues to grow over this period at somewhere near 4.5 percent.

9.75 This doubling of the operating surplus appears to be a high cost to pay in order to reduce the debt-to-GDP ratio, but

The economy, both domestic and international, can play havoc with the best of plans; and the impact on the Canadians who bear the burden of program reductions can make it difficult for a government to stay the course.

Exhibit 9.8

Canada–U.S. Differences in Real Interest Rates*



* Real interest rates are nominal rates less inflation.

Source: CANSIM, Statistics Canada

Each successive budget carries implications for the longer term, and it is important to frame these budgets in the context of a longer-term strategy for the burden of debt that Canadians should be expected to carry.

once that goal is reached, the operating surplus required to stabilize the lower debt-to-GDP ratio in the eleventh year would fall to somewhere near \$20 billion.

9.76 Clearly, reducing the operating surplus that would be needed to carry a lower debt-to-GDP ratio would give a government considerably more flexibility in the future. It would mean that if interest rates rose or incomes fell, there would be more room for the government to manoeuvre. It would also mean that in 2006 and beyond, there would be room for the government to finance program demands without resorting to increased taxation, or without increasing the burden of debt on future generations. This is especially important in light of the fiscal challenges expected to arise from such factors as an aging population.

9.77 But there are costs; these would begin to appear in 1996–97 when the government is committed to increase the operating surplus by \$6 billion to bring the deficit and debt-to-GDP ratio down. By 2005, the additional operating balance needed would be considerably more.

9.78 Stabilizing the debt-to-GDP ratio at a higher level would cost less in the short term, but it would mean less flexibility in the future. Stabilizing the ratio over a longer time period would reduce the cost in each of the years as we move to the new ratio, but the risk of not getting there is greater because of the possibility of unforeseen events such as higher interest rates or lower growth.

The need for a consensus

9.79 The issue comes down to a choice that the government must make, in consultation with Parliament and the public. Should the debt burden be decreased or stabilized? If it should be decreased, over what time period? Each

successive budget carries implications for the longer term, and it is important to frame these budgets in the context of a longer-term strategy for the burden of debt that Canadians should be expected to carry.

9.80 While analogies are not always perfect, it is possible to put reduction of the debt burden in the context of a mortgage reduction plan. Most of us who have mortgages establish a long-term strategy for their reduction or elimination; 25 years seems to be the most common. But we organize our payments in terms of shorter chunks ranging from six months to seven years, and we do that in terms of interest rates and our income. At the end of each of these chunks, we then consider our payments under the next chunk in terms of interest rates and income and whether we want to alter the time frame for the longer-term strategy.

9.81 We think that reducing the burden of debt should be considered like a mortgage reduction strategy. First we need to arrive at what we consider to be affordable and how long we want to take to get there. This is not a strategy that requires a series of annual plans laying out spending, revenues, interest rates and economic growth for each of the years; it is a vision or goal for where we want to be at some future date. However, it does mean that short-term budget plans, for which a government should be accountable, ought to be framed with the longer-term strategy in mind.

9.82 The current government has given Canadians a sense of the longer-term strategy by proposing that the debt-to-GDP ratio be reduced. However, it has not provided an indication of what would be seen as affordable for a longer period.

A forum for discussing the longer term

9.83 Last fall the government responded to the many suggestions calling for a more open budget process. By discussing with Parliament the concerns the government had about debt and the need for input into the spending options, the government was able to promote a consensus that reducing the deficit mattered.

9.84 To make that an even franker and more fruitful discussion, we think that Parliament and the public need to focus on debt issues, particularly the amount of debt we carry. The current budget indicated that in 1996–97, the government would begin to reduce the debt-to-GDP ratio. However, it did not set out a plan for reducing the debt burden beyond that year; nor did it specify the level at which it should be stabilized, or approximately when that should occur. Yet every budget carries implications for that.

9.85 We believe that these are the kinds of choices that a government must discuss with Parliament and the public as a prelude to setting annual budgets. They are important because they have a direct bearing on those who bear the costs for reducing the burden of debt as well as on those who will receive the benefits.

9.86 We are aware that discussions of this kind are difficult during the debate after tabling of the budget because of the political nature of the process. However, they can take place in the fall during the new budget consultation process. We encourage the government to use that process to engage Parliament in a discussion about debt sustainability and the longer-term implications for future Parliaments and taxpayers.

The Need for National Financial Information

Why do we need national information?

9.87 In our 1993 chapter we talked briefly about national deficits and debt information. So far, in this chapter, our discussion about debt burden and its sustainability has been at the federal level. The difficulty for Canadian taxpayers is that the federal government is just one of the three levels of government that taxes and borrows on their behalf.

9.88 We need national information to give us a sense of the financial health of all governments in the country. As taxpayers, we ought to be able to assess whether individual governments are really reducing their debts or avoiding the issue by off-loading them to another level of government, or by transferring them to accounts that aren't part of the "books".

9.89 Economists, policymakers and other analysts also need national information so that they can estimate the impact of various components of the economy, including the public sector, on the economic performance of the entire economy.

9.90 Furthermore, we need this kind of information so that we can establish benchmarks and see how we are performing relative to other countries. In this regard, we also need information that would allow us to see how one province is performing relative to another.

Three measures of debt

9.91 Public Accounts. As part of overall accountability, the federal government and each of the provinces are required to provide audited summary level financial statements to their legislatures on their annual financial performance as well as their overall indebtedness. These

The fall budget consultation process could be used to engage Parliament in a discussion about debt sustainability and the longer-term implications for future Parliaments and taxpayers.

We need national information to give us a sense of the financial health of all governments in the country.

statements appear in what is generally called the *Public Accounts*.

9.92 To get information about deficits and debt for the entire Canadian public sector, we could simply combine the appropriate information from each of the federal and provincial financial statements. But to be satisfied that the information was complete and reflected all the activities of each government, we would need to be sure that these financial statements were prepared on a comparable basis.

9.93 The Public Sector Accounting and Auditing Board (PSAAB) of the Canadian Institute of Chartered Accountants has issued a number of government accounting recommendations for strengthening and standardizing government financial information with the goal of making it as consistent as possible throughout the country. While governments have made significant progress in improving government financial reporting, there are still varying degrees of compliance with these PSAAB recommendations. For example, a few provinces do not yet fully include as part of their debt the amount they have borrowed from their own employee pension plans.

9.94 However, even if all provinces complied fully with these recommendations, there would still be some legitimate reasons for a lack of comparability among provincial financial statements. For example, some provinces view the liabilities of public enterprises like workers' compensation boards and hydro commissions as part of government debt while others exclude them. And yet, such organizations could and do have significant liabilities.

9.95 In addition, since much of the progress has taken place in recent years, it

is often difficult to obtain comparable information on an historical basis to allow longer-term assessment of national debt issues.

9.96 Financial Management System. Alternatively, we could obtain a measure for the national public debt as well as for each province by using data from Statistics Canada's *Financial Management System (FMS)*. The *FMS* gathers data on all three levels of government, using a common framework. These data are used as the basis for determining equalization payments to the provinces under the *Federal-Provincial Fiscal Arrangements Act*.

9.97 However, the information in the *FMS*, while consistent among provinces, does not fully reflect the provincial liability. For example, it does not include provincial employee pension plan liabilities, though it does so for the federal government. Furthermore, it does not include the unfunded actuarial liabilities of the provincial workers' compensation boards.

9.98 System of National Accounts. A third source of information to measure public sector debt is the *System of National Accounts (SNA)*, also prepared by Statistics Canada. The *SNA* is a method of recording all economic activity in Canada and is used primarily by economists to measure the impact of a variety of factors on this economic activity. While it does contain information on public sector indebtedness, it does so only to assess the impact of that sector on the economy.

9.99 This system of recording economic activity was in place long before government indebtedness became a problem. It has been universally used and accepted by other countries as well as international organizations such as the World Bank, the OECD and the United

Nations. As such, it is commonly used for international comparisons.

9.100 However, the *SNA* may not reflect all federal and provincial liabilities. For example, under the *SNA*, the federal deficit last year was just under \$33 billion while the audited federal deficit reported in the *Public Accounts* was close to \$42 billion. The bulk of the \$9 billion difference can be explained by the different treatment of government employee pensions. The audited *Public Accounts* numbers treat pension contributions, which are deducted directly from public servant pay cheques, as money borrowed by the government and to be repaid. The *System of National Accounts* treats these transactions simply as revenues.

Can there be one set of national information?

9.101 The three systems discussed in the previous section go a long way toward providing information that meets the needs of their intended audiences who understand the limitations of the systems. But if the data were to be used for unintended purposes, or used interchangeably without adequate explanation, these limitations could lead to confusion or inaccuracies. There is also a risk that the data used were simply the most accessible rather than the most appropriate for the situation.

9.102 In an ideal world, there would be one all-encompassing financial database that would allow data to be tailored to meet the varying needs of users. However, there isn't one, and because of that, it puts a responsibility on the preparers of the three databases to explain the uses and limitations of their data in a useful way. It also puts a responsibility on users to use the appropriate information along with the proper explanation.

9.103 In this context, we believe that as a first step to improving the understanding of public sector financial information, a working group needs to be established. This working group could be charged with the responsibility of reviewing the concepts underlying each system in order to generate a better understanding of the uses of the various government reporting systems and to improve access to them. The group could also explore the possibilities of integrating the three systems. Members of that working group might include Statistics Canada, the Canadian Institute of Chartered Accountants, other accounting bodies and federal and provincial representatives, such as finance and comptroller officials. To begin the process, we would be prepared to convene the first meeting.

Deficit reduction and balanced budgets are not ends in themselves.

Conclusions

9.104 This chapter has focussed on two themes of information — information for understanding some key elements about debt, and information for making choices about those elements.

9.105 Information for understanding means providing Parliament and all Canadians with the tools to help them realize that there is a momentum to debt that makes it increasingly more costly to control the larger it becomes, and the more difficult to contain through one or two budgets. Without that kind of understanding, the federal government will not be in an easy position to make the difficult revenue and expenditure choices that lie ahead.

9.106 Information for understanding also means helping people recognize that deficit reduction and balanced budgets are not ends in themselves. They have to be seen in the context of a long-term vision or goal for the amount of debt we believe we can carry relative to our tax base and

Without a long-term debt strategy, governments can set budget targets and be successful in meeting them, but cannot determine whether they are leading us to where we want to be financially, socially and culturally.

Dealing with our debt problems begins with developing a consensus about an acceptable level of debt that we can afford relative to our income. There is no one right answer to this question and that is why it is so important that this be debated in Parliament.

to our views about the role and size of government.

9.107 Determining a strategy to achieve that vision is something the government and Parliament need to debate and develop a consensus on. Without a strategy, governments can set budget targets and be successful in meeting them, but cannot determine whether they are leading us to where we want to be financially, socially and culturally.

9.108 In the fall of 1994, the current government initiated a new budget consultation process. We believe that this process could be an effective forum to debate the issue of long-term debt sustainability and we encourage the government to do so.

9.109 The final area about debt that needs both an understanding and a consensus is national information. Canada is a country of three tax collectors and one taxpayer. It is also a country with three different measures of annual deficits and accumulated debt, each serving a different purpose. We are concerned that Canadians may not fully understand the differences and limitations of the three systems.

9.110 There is no confusion in anyone's mind that all levels of government in Canada collect taxes. There is also no confusion in anyone's mind that both the federal and provincial levels borrow money. So why should there be any confusion about how much we, as a country, currently owe and how much we

can afford to carry? We believe that it is time to put a priority on helping people use the right information for the right purpose.

9.111 But regardless of which government borrows the money or the way we measure it, we should not lose sight of why better information is necessary. Persistent program spending in excess of revenues along with sustained high interest rates and low economic growth have created a debt burden that constrains the government's ability to deliver the programs and activities Canadians have come to expect. Parliamentarians and Canadians need to understand that these debt problems we have created won't go away by themselves, nor through one or two budgets, nor by simply balancing the budget.

9.112 In our view, dealing with our debt problems begins with developing a consensus about what is an acceptable level of debt that we can afford relative to our income. There is no one right answer to this question and that is why it is so important that this be debated in Parliament. The difficulty is that Parliament does not have the information that will help make that debate meaningful. We encourage the government to provide this information for the fall budget consultation process and seek the views of Parliament and Canadians on what is an acceptable burden of debt.

Audit Team

Margaret Cross
David Willey
Basil Zafiriou
Paul Zind

For further information, please contact Jeff Greenberg, the responsible auditor.

Report of the Auditor General of Canada to the House of Commons – 1995

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Report of the
Auditor General
of Canada
to the House of Commons

Chapter 10
Crown Corporations:
Fulfilling Responsibilities for Governance

October 1995

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Auditor General
of Canada
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Fulfilling Responsibilities for Governance



October 1995

This October 1995 Report comprises 8 chapters and a Foreword and Main Points. In order to better meet clients' needs, the Report is available in a variety of formats. If you wish to obtain another format or other material, the Table of Contents and the order form are found at the end of this chapter.

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Chapter 10

Crown Corporations

Fulfilling Responsibilities
for Governance

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Assistant Auditor General: Wm. F. Radburn
Responsible Auditor: Grant Wilson

Crown Corporations

Fulfilling Responsibilities for Governance

Main Points

10.1 Public policy objectives and government activities are carried out through a variety of organizational forms. Although the number of entities is decreasing, the Crown corporation form continues to be the most significant outside of departments and agencies. Each form requires an appropriate degree of control and of accountability, and Crown corporations have a framework established for this purpose under Part X of the *Financial Administration Act*.

10.2 The Part X framework for Crown corporations permits flexibility in operations, with appropriate controls, and clearly sets out the mechanisms to account for the way responsibility has been fulfilled by those in authority. The control and accountability framework is a sound legislative framework and one that, in our view, has been working well over the 11 years it has been in force. A much improved situation exists today compared to that which prevailed prior to its introduction in 1984. In our view, Canadians are generally well served by this framework governing the activities of Crown corporations.

10.3 However, in the second cycle of special examinations (a type of value-for-money audit) conducted by the Office, in 80 percent of the active corporations there was at least one significant deficiency reported to the board of directors. The areas reported on most frequently related to: (1) corporate and strategic planning and (2) performance measurement and reporting. In fact, every corporation with a significant deficiency had at least one reported in one of these two areas.

10.4 In some corporations, corporate mandates may not have been adequately interpreted to allow objectives to be established in a way that would enable their achievement to be determined. In others, the type of performance information collected and reported is not oriented sufficiently toward the outcomes of corporate programs or activities. In only a few corporations we examined were actual results compared against meaningful targets. While information is often provided on what corporations do, insufficient information is provided on what is achieved. Consequently, government and Parliament are less able to hold corporations to account for their achievement of intended results.

10.5 The process and structure, called *governance*, used to direct and manage the affairs of the corporation with the objective of enhancing its value to Canadians can help to address these issues. Governance of Crown corporations is not solely the responsibility of the board of directors; active involvement of government and Parliament is also required. We outline a number of measures that might be taken by all those who have a governance responsibility.

10.6 The majority of Crown corporation chairs and CEOs, in responding to our survey in February 1995, supported the need for and worth of special examinations to the corporation, government and Parliament as a means of assessing accountability information. In preparing for the third cycle of special examinations, we anticipate achieving greater efficiencies and providing increased value to all those in the governance chain.

Main Points (cont'd)

10.7 Other matters relating to control and accountability of Crown corporations and their overall management include the following:

- Crown corporation debt has increased significantly;
- some corporations are subject to income tax while others are not;
- exempt Crown corporations should be revisited with the objective of establishing a framework for control and accountability similar to that in Part X; and
- reporting appropriations as revenue should be discontinued.

Introduction and Purpose

10.8 Crown corporations have a significant and historical presence in Canadian society. Before Confederation they were used for building canals and operating ports and harbours. The establishment of the Canadian nation involved a commitment to build an intercontinental railway to link New Brunswick and Nova Scotia to central Canada. Over the years, vast distances, a sparse population, the presence of a powerful neighbour, strong and distinct national interests, and the existence of two main cultural and linguistic groups nurtured the establishment of Crown corporations.

10.9 Federal Crown corporations are defined as those in which the government has 100 percent ownership interest. There are other corporations (not called Crown corporations) in which the government has

100 percent ownership interest; these are called departmental corporations, as their nature and purpose more closely parallel those of departments. There are still others where the government has investments of less than 100 percent, called mixed and joint enterprises. In addition, other institutional forms (for example, special operating agencies and non-governmental organizations such as local airport authorities) have been used to deliver public policy objectives.

10.10 Exhibit 10.1 provides an overview of the different structures for government activity, which range from more centralized control and protected activities found in government departments and departmental corporations to widespread delegation of decision making under the more competitive conditions found in commercial Crown corporations and the regulated private sector.

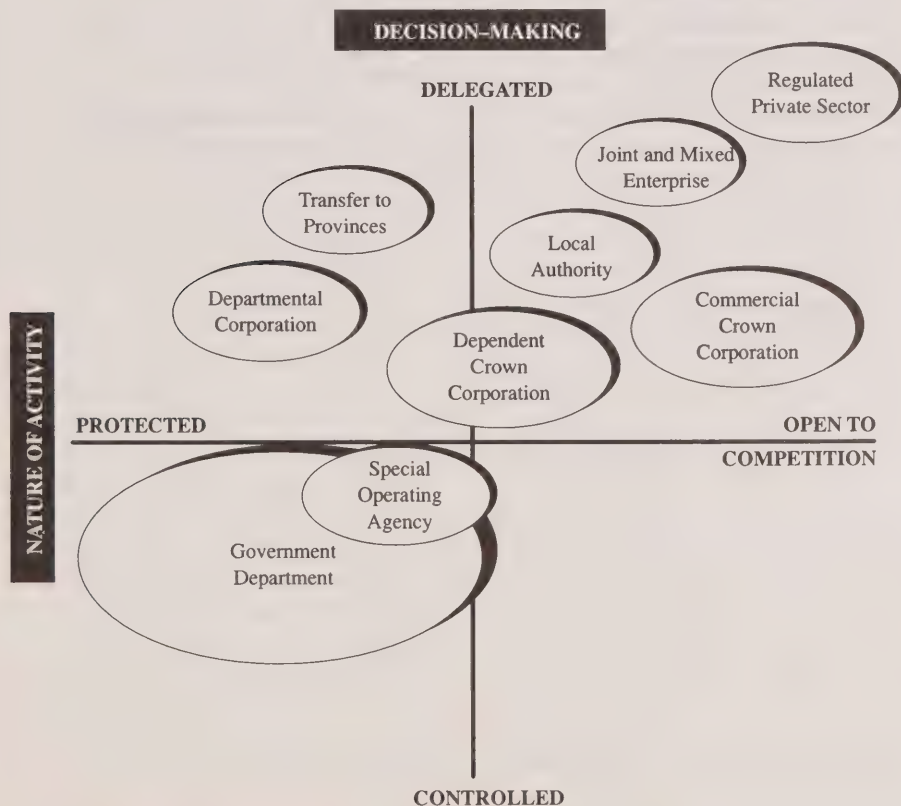


Exhibit 10.1

Government Organizational Options

Source: Crown Corporations and Privatization Sector, Treasury Board Canada/Department of Finance

10.11 Crown corporations, by far, form the largest category of these other institutional forms. There are 48 parent Crown corporations with 64 wholly owned subsidiaries. They are involved in many sectors of the economy, including: transportation; energy and resources; agriculture and fisheries; development and construction; government services; culture; and financial intermediaries. Activities encompassed by Crown corporations range from fish marketing to nuclear energy and from mining to public broadcasting.

10.12 In aggregate (excluding the Bank of Canada), ongoing Crown corporations had total assets of \$57 billion in 1994. This was an increase over the past five years of more than \$10 billion, financed primarily by growth in debt (see Exhibit 10.2). Total government loans to Crown corporations stood at approximately \$14 billion in 1994. Crown corporations also held other debt of \$24 billion, representing money raised from the private sector on the strength of direct or implicit guarantees by the Canadian government. In 1994, parliamentary budgetary appropriations to Crown corporations amounted to

\$4.6 billion, provided primarily to three corporations. Total employment stood at over 115,000, or about 23 percent of total federal government employment.

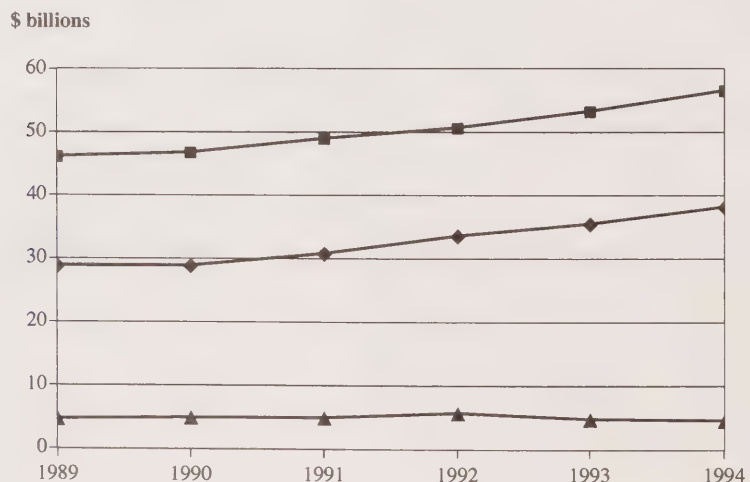
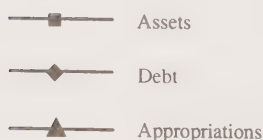
10.13 There have been a number of recent activities affecting Crown corporations:

- The number of Crown corporations has decreased in the past five years through privatization and commercialization, rationalization and dissolution, from 53 parents and 112 wholly owned subsidiaries in 1989 to 48 parents and 64 wholly owned subsidiaries in 1995.
- Board membership has been reduced, largely by the passage of the *Government Organization Act* in 1995, from over 530 in 1993 to approximately 400 today.
- Some Crown corporations have downsized or restructured, reducing operating costs to address diminishing funding and to try to achieve self-sufficiency.
- Many legislative mandates have undergone review and amendment.
- Most Crown corporations have undergone a second cycle of special

Exhibit 10.2

Crown Corporation Assets, Debt and Appropriations

Asset growth has been financed mainly through increased debt; parliamentary appropriations have remained fairly constant.



Source: President of the Treasury Board's 1994 Annual Report to Parliament "Crown Corporations and Other Corporate Interests of Canada"

examinations (a type of value-for-money audit) and most of the audit reports have now been provided to the boards of directors.

10.14 A broad range of talents among those at the executive, board and management levels is required to manage such a diverse and changing portfolio of activities. It is with these individuals in mind that we address the management of Crown corporations in the broadest sense, as corporations strive to carry out public policies in a manner that benefits all Canadians. In the chapter we:

- report pervasive issues arising out of special examinations of Crown corporations;
- raise a number of separate matters relating to Crown corporations that do not stem from special examinations but that represent an update of the Office's views and positions; and
- propose courses of action to address these matters.

10.15 Essentially, then, it is the issue of **governance** that is the focus of this chapter. We identify governance responsibilities by identifying those issues we believe need to be addressed through greater involvement of Parliament, government, board and management.

10.16 Many of the issues have been raised before, the last time in 1993, but the completion of the second cycle of special examinations offers an opportunity to consolidate the results of the audits and reflect on what Parliament, government, and Crown corporations can do to improve Crown corporation accountability, mainly through improved governance. For those who wish to find out more about what special examinations are, how they are reported, their results, and the results of a survey of chairs and CEOs of Crown corporations about special examinations, the Appendix provides this information. We reported on the first cycle of special

examinations in our 1990 Report chapter, "The Crown Corporation Audit Regime".

Background and Context

Corporate Environment

10.17 Crown corporations operate in a complex and rapidly changing environment. Technological advances, accompanied by increased globalization and competitiveness, greater concern for environmental protection, fiscal constraints and public desires for greater transparency in government overall, continue to place pressure on those who manage them. The call for greater care and productivity by Crown corporations and for creative solutions to strategic issues remains strong. At the same time, corporations must deal with the added complexity of managing within the public sector.

10.18 Corporations in the private sector operate with the understanding that maximizing shareholder wealth is the major priority. However, the primary objectives for public sector entities are not as clear cut. Many Crown corporations are required to achieve self-sufficiency while at the same time meeting public policy objectives (such as delivering needed public services even when they may not be commercially viable). Varied and sometimes even conflicting purposes shape complex Crown corporations that may use revenues generated by their commercial activities to help support non-profit-oriented endeavours devoted to serving the public interest.

Accountability and Governance

10.19 All institutional structures used in government, whether departmental, local authority, joint or mixed enterprise or Crown corporation have at least one thing in common: they are all instruments of public policy. They differ, however, in the way they are structured to effect public policy. They also differ markedly in their

Improvements in governance are required to address special examination deficiencies.

frameworks for control and for accountability. For example, departments are subject to relatively detailed administrative rules and procedures, and decision making tends to be centralized. Accountability for fulfilling public policy resides with the ministers responsible for them. Local authorities, a recent organizational form used by the government, have much greater autonomy and less direct control by government and Parliament.

10.20 Crown corporations have less autonomy and more controls than local authorities, but more autonomy and fewer controls than departments. In our view, as new structures for administering public policy are created by government, it is important that an appropriate framework for control and for accountability be established prior to their creation. As control is decentralized, the requirement for greater accountability increases and this should be reflected in the framework established for such entities.

10.21 It was to this end that the *Financial Administration Act* was amended in 1984 to establish an improved framework for control and accountability for Crown corporations, represented by Part X of the Act. We have strongly supported the control and accountability regime established by the Act for Crown corporations, because it provides the means for corporations to act with an appropriate degree of independence of action while providing for appropriate accountability to, and control by, Parliament and government.

10.22 The framework provides a number of key features that include:

- a clear portrayal of “who is responsible for doing what” (Parliament, government, board and management);
- improved planning and reporting provisions; and
- a well-defined, rigorous audit regime.

10.23 It is noteworthy that only recently has government given consideration to having departments provide business plans and annual reports to Parliament, a key accountability provision entrenched since 1984 in legislation for Crown corporations.

10.24 Exhibit 10.3 outlines in a general way the roles and the responsibilities associated with those in the accountability chain, as set out in Part X of the *Financial Administration Act*. Governance relates to how responsibilities are carried out.

10.25 The framework for accountability of Crown corporations builds upon that structured for the private sector. For example, in both sectors the boards of directors are responsible for the overall management of the businesses, activities and other affairs of the corporation. However, there are some significant differences between the sectors. Whereas in the private sector the board has the sole responsibility and authority to act on behalf of the shareholders in managing the affairs of the corporation, this function is shared in Crown corporations. Boards of Crown corporations have the same responsibilities as their private sector counterparts but do not have the same authority. The government approves the corporate plan; the chief executive officer (CEO) is appointed by the government, not by the board. This means that government, boards of directors and management must have a common understanding of their respective roles, the authority to carry out those roles, and accountability for the use of that authority.

10.26 A great deal of worthwhile work has been devoted to providing boards of directors with ways to improve the manner in which they discharge their responsibilities. Private sector reports such as *The Financial Aspects of Corporate Governance in the United Kingdom*, referred to as the *Cadbury Report* (U.K., 1992), and *The Committee of Sponsoring Organizations of the Treadway Commission* (U.S., 1994) offer insights

We support the Crown corporation's framework for control and accountability set out in Part X of the FAA.

Exhibit 10.3

Main Elements of the Crown Corporation Control and Accountability Framework

	Parliament	Governor in Council	Treasury Board	Appropriate Minister	Board of Directors	Management
Plans/Budgets						
Corporate Plan		Approve	Review	Recommend	Submit after approval	Prepare
Operating Budget			Approve	Recommend	Submit after approval	Prepare
Capital Budget			Approve	Recommend	Submit after approval	Prepare
Reports						
Summaries of Plans/Budgets	Receive			Approve	Submit after approval	Prepare
Corporate Annual Report	Receive			Receive	Submit after approval	Prepare
Annual Consolidated Report	Receive		Prepare			
Annual Report on Tablings	Receive		Prepare			
Directives	Receive	Approve		Recommend	Advise	
Creation, Acquisition, Disposal, Dissolution						
Parents	Approve		Review	Recommend		
Subsidiaries		Approve	Review	Recommend		
Appointments						
Directors		Approve		Appoint		
Officer Directors (CEO)		Appoint		Recommend	Advise	
Officers (excl. CEO)					Appoint	Recommend
Auditors of Parent		Appoint		Recommend	Advise	
Audits						
Internal Audit					Receive	Receive
Annual Audit	Receive			Receive	Receive	Receive
Special Examination	May Receive			May Receive	Receive	Receive

into the way effective boards of private sector corporations should operate. In 1994, the Toronto Stock Exchange published *Guidelines for Improved Corporate Governance in Canada* that encourage publicly traded Canadian corporations to describe their corporate governance practices in their annual

reports. In addition, the Canadian Institute of Chartered Accountants in 1995 published its draft *Guidance for Directors – Governance Processes for Control*.

10.27 Gérard Veilleux's report *Unfinished Business* in 1993, the Canadian Comprehensive Auditing Foundation's *Six*

Governance involves not only the board and management but also government and Parliament.

Special examinations conducted of 30 Crown corporations over the past five years reported significant deficiencies in 80 percent of them.

Characteristics of Effective Governance and our own 1993 Report chapter "Crown Corporations: Accountability for Performance" raise further governance issues directed more toward public sector enterprises. The Crown Corporations Directorate of Treasury Board/Department of Finance, in conjunction with the Conference Board of Canada, sponsored a conference in October 1994 on *Corporate Governance, Improving the Effectiveness of Crown Corporation Boards*. They collaborated with the Canadian Centre for Management Development in 1993 to publish a guide for directors, *Directors of Crown Corporations: An Introductory Guide to Their Roles and Responsibilities*, and the Department recently established an Advisory Committee on corporate governance matters.

10.28 As the framework for accountability of Crown corporations is structured differently from that of private sector corporations, Crown corporation governance involves not only the board of directors and management but also government and Parliament. Each party's role in governance is important to ensuring that Crown corporations are managed in the best interests of the public.

Issues Raised Previously

10.29 Since the amendments to the *Financial Administration Act* in 1984 affecting Crown corporations, we have brought a number of issues to Parliament's attention. Exhibit 10.4 provides a summary of the major issues along with some summary observations.

Special Examination Results

10.30 It has been five years since we reported the results of the first cycle of special examinations of Crown corporations carried out by this Office. Work on the second cycle is nearing

completion. Although no individual special examination report has warranted our taking the exceptional route of bringing it to the attention of Parliament, collectively the second cycle of special examinations raises concern in two important areas. We have reported to boards of directors one or more significant deficiencies in 80 percent of the active Crown corporations we examined in the second cycle.

10.31 Each of these corporations had a significant deficiency related to either (1) corporate and strategic planning or (2) performance measurement and reporting, or to both. We believe this is important to Parliament and government because it indicates that these Crown corporations:

- do not have well-articulated corporate visions, values and goals;
- do not have clearly expressed strategies or action plans to achieve their mission and vision;
- do not know the extent to which they are achieving their objectives; or
- do not report adequately on these objectives and strategies to Parliament and government.

10.32 The following paragraphs discuss the problems and provide a basis for their resolution. Exhibit 10.5 provides a summary of our views on how the issues raised may be addressed through improved fulfillment of responsibilities for governance. These suggestions recognize that roles and responsibilities are defined in legislation but that everyone in the governance chain, from management to Parliament, needs to be aware of the deficiencies reported in special examinations and all need to work to ensure that they are addressed.

Corporate and Strategic Planning

10.33 The accountability regime requires that each Crown corporation annually prepare for approval by the

Exhibit 10.4

Issues Previously Raised by This Office

Year	Issues	Summary Observations
1989	<ul style="list-style-type: none"> The quality of information to Parliament (corporate plan summaries and annual reports) had weaknesses. Linkages between objectives in corporate plan summaries and reporting on their achievements in the annual reports were inadequate. New directors were not adequately briefed on their duties. Audit of quantitative performance information had not yet been initiated. 	Considerable progress had been made in implementing the control and accountability framework for Crown corporations and most basic processes were in place. However, there was room for improvement in performance measurement and reporting, and more attention was needed to linking stated objectives to performance.
1990	<ul style="list-style-type: none"> Results of the first round of special examinations carried out on Crown corporations showed many significant deficiencies related to a lack of clearly defined objectives and a failure to measure and report on performance. 	The audit regime for Crown corporations, including the provision for special examinations, was considered to constitute an appropriate and worthwhile regime as part of the overall system of checks and balances by providing assurances as to whether accountability information to corporations, the government and Parliament was reliable.
1991	<ul style="list-style-type: none"> Crown corporations were not adequately disclosing in their annual reports the extent to which their objectives were being met. Amounts received through parliamentary appropriations were not being reported in a clear and consistent manner. Internal audit required strong support of management and audit committees to enable it to play the important role given to it through legislation. Exempt corporations did not have legislative provisions to ensure that key accountability provisions were being met. 	Critical to ensuring and maintaining accountability is the provision of information to Parliament. Such disclosure would enable informed decisions to be made and would provide an indication of the achievement of intended results.
1993	<ul style="list-style-type: none"> Board governance responsibilities could be improved through a number of mechanisms. Performance reporting in annual reports continued to be inadequate although improving. Accounting for parliamentary appropriations continued to be inconsistent among corporations. 	Reporting on performance could be enhanced further by reporting against all objectives; stating objectives in more measurable terms; and reporting performance information that focusses principally on outputs and outcomes.

Governor in Council a corporate plan that includes a strategic planning component. Corporate and strategic planning deals mainly with setting the direction of future corporate initiatives. Clarifying the corporate mandate and mission by articulating the corporate vision and identifying objectives, values and goals is the primary means of setting the corporate direction. Once the overall strategic

direction is accepted, strategic alternatives and priorities are considered to ensure that strategic plans can be converted into operational results.

10.34 Second cycle special examinations indicate that many corporations do not have clearly articulated corporate visions, values and goals. Other corporations have not

Exhibit 10.5

Governance Solutions to Identified Problems

	Corporate and Strategic Planning	Performance Measurement and Reporting
PARLIAMENT (Committees)	Consider the need to clarify legislative mandates of individual Crown corporations when legislation is under review	Receive, review and use corporate performance information included in reports submitted to Parliament
GOVERNMENT (Cabinet, Treasury Board, Responsible Minister)	<p>Establish measures of performance (including expected outcomes) for individual corporations</p> <p>Distinguish, where practicable, the outcomes of delivering public policy from business activities</p> <p>Provide mandate guidance regarding the range of corporate activity that is considered acceptable</p> <p>Make clearer the extent of authority delegated to the board</p>	<p>Gather information needed to track performance (benchmarks, performance indicators)</p> <p>Report to Parliament on performance of Crown corporations</p> <p>Question the quality and completeness of performance measurement</p> <p>Encourage corporations to improve accountability reporting</p> <p>Consider requesting audits of quantitative (performance) information reported by Crown corporations relative to their objectives</p> <p>Reject corporate plans where objectives are unclear, not comprehensive and not expressed in measurable terms</p>
BOARD OF DIRECTORS	<p>Seek to clarify and interpret the corporate mandate in order to provide effective strategic direction</p> <p>Provide corporate plans that clearly allow an assessment of performance in terms of outcomes and outputs and the discharge of responsibilities</p>	<p>Explore the development of performance measures that would provide a meaningful indication of public policy results</p> <p>Receive, review and report to Parliament information on the extent to which corporations achieve objectives within the reporting year, in addition to the audited financial statements</p>
MANAGEMENT	<p>Ensure that activities are consistent with the achievement of the mandate</p> <p>In corporate plans, provide meaningful objectives and performance indicators to enable their achievement to be measured</p>	<p>In annual reports, compare results to plans, objectives and measures</p> <p>Collect and report adequate information on the achievement of public policy roles</p> <p>Gather and report information needed to track corporate performance</p>

identified corporate alternatives and priorities or translated their goals into clear and measurable objectives. Accordingly, the government and the boards and senior management of these corporations are less able to offer clear and effective strategic direction to maximize the likelihood of appropriate performance. In addition, without such

clarity of mandate, objectives and strategy, the risk of operating outside their parliamentary mandate increases. Finally, for those corporations, it is difficult to determine if operations are managed with minimal cost, and if overall output is optimized or expected outcomes are realized.

10.35 In some cases corporations are unable to articulate corporate visions and goals because of the difficulty in interpreting their legislated mandates. Others have legislated public policy mandates that are at odds with the goal of self-sufficiency placed on them by fiscal constraints.

Clarifying direction and desired outcomes

10.36 We believe that corporate and strategic plans could be enhanced through better communication of the expectations for the corporation. Although the wording of legislative mandates is usually general in order to avoid frequent changes and provide for some flexibility in interpretation, government should consider clarifying mandates further when legislation is placed before Parliament for consideration. Such has been the case in a number of recent Bills before Parliament, including, for example, those pertaining to Canada Mortgage and Housing Corporation and Export Development Corporation.

10.37 A less formal means of clarifying expectations is to improve communication among the responsible minister, the board and the chief executive officer, through agreed-upon performance expectations expressed in terms of measurable outcomes. Where the mandate is not clear and there are a number of possible interpretations that could be given to it, the government should be providing clear direction and the board should be seeking it or interpreting it in the corporate plan, which receives government approval.

10.38 Government should provide boards of directors with quantified, long-term performance expectations against which results can be measured, where these are not adequately enunciated by boards. This is particularly important for Crown corporations that are not self-sustaining and require parliamentary appropriations, and that need to report

against various measures of success. In addition, boards of directors and CEOs of Crown corporations could be provided with an indication of the spectrum of acceptable activity. Activities that fell outside the spectrum would be understood to be unacceptable.

Performance Measurement and Reporting

10.39 Without adequate information on performance, how can management, boards, government and Parliament assess the extent to which expected results have been achieved? Performance measurement includes information that compares results achieved, or outputs and outcomes, with those that were planned. This can include information on a variety of performance indicators that show the extent to which the corporation is achieving its objectives at the most reasonable cost.

10.40 Although it is a requirement to report performance to Parliament, many corporations we examined have inadequate information for performance measurement. As might be expected, many of these corporations also have significant deficiencies in the area of planning. When objectives are unclear or have little basis for measurement, it is difficult if not impossible to develop performance indicators that show how well the objectives are being achieved. Only a few of the corporations we examined compare and report actual results against meaningful targets set out in the corporate plan. As well, performance information that compares similar activities within a corporation or with other entities is rare.

10.41 In many corporations, the type of performance information collected and reported is not oriented sufficiently toward the outcomes of corporate programs and initiatives. Although useful information on activities such as expenditures and revenues is usually available, it does not adequately provide management, the board of directors and government with a

Without adequate information on performance, how can management, board, government and Parliament assess the extent to which expected results have been achieved?

Information on what was done (activities) is seldom the same as information on what was achieved (results).

means to assess the organization's success in carrying out its mandate and to make informed strategic decisions. Nor does it always provide an indication of productivity, or of whether or not corporate services are satisfactory. Information on what was done (activities) is seldom the same as information on what was achieved (results).

10.42 We recognize the difficulties of developing performance information but urge continued efforts to improve its measurement and reporting; even to the extent of using comparative information from other similar entities or activities (for example, benchmarking). In this regard, alternative approaches to assist in the development of appropriate measures and methods of reporting might include a government request for audits of quantitative (performance) information to be reported by Crown corporations relative to their objectives. This provision of the FAA has not yet been used.

Corporate plan summary and annual reports

10.43 Corporations are required by the *Financial Administration Act* to report on their performance through the corporate plan summary and the annual report. A well-functioning accountability framework is based on the premise that Parliament and government will receive useful information that will allow active judgment of corporate performance. The corporate plan summary serves to inform Parliament of the objectives of the corporation as approved by government, and the corporation's plans for achieving these objectives. The annual report should demonstrate to the government and Parliament the extent to which the plans were actually carried out and the objectives achieved.

10.44 The second cycle of special examinations found that some corporate plan summaries did not consider strategic issues and alternatives or provide action

plans to address those considered; or include performance goals and objectives that were complete and measurable. Following a review of annual reports, we also found that corporations were not adequately reporting on the extent to which their corporate objectives were being met, although the FAA requires them to do so. This situation, where information is not adequately provided by corporations, indicates to us that the government, through the Crown Corporations Directorate of Treasury Board /Department of Finance, could assist by providing corporations with more guidance in addition to that already provided on the preparation of corporate plans and annual reports, in the area of performance reporting and how it should be included in corporate plans and annual reports.

10.45 For example, a number of major Crown corporations do not collect segmented information on the profitability of individual business lines or activities. Beyond information to generate reports to the board of directors, management needs adequate information to direct and monitor the day-to-day business operations. Our concern is that in the information reported, activities related to the fulfillment of public policy often cannot be distinguished from what may be unprofitable commercial activities. More important, corporations often do not identify performance in relation to goals and objectives, where they are stated.

10.46 **Tabling corporate plan summaries and annual reports.** We believe that Crown corporation reporting could be substantially enhanced if all corporate plan summaries and annual reports tabled by the ministers responsible contained the information required for Parliament to assess the performance of corporations, including clear and measurable objectives, expected outcomes and their achievement. When pertinent performance information is not provided to Parliament, or if Parliament through its

committees does not review and use the information, the accountability framework is weakened.

10.47 President of the Treasury Board's Report. We recognize that improvements to the President of the Treasury Board's annual report to Parliament have been made. Further enhancements to reporting performance information to Parliament, including information on a portfolio or sectoral basis, in our opinion would constitute an improvement. This information could include the expected rates of return for this category of government investment, or the debt limits, if any, expected for corporations, and so on. Such reporting would assist Parliament in determining whether or not Crown corporations in total are generating the desired levels of social and economic benefits at reasonable costs. The Crown corporation form permits this kind of analysis and direction and we recommend that advantage be taken of it.

Additional Governance Issues

Clarifying roles and responsibilities

10.48 One of the major roles of the board of directors in fulfilling its mandated responsibilities is to work with management to set strategies for achieving the corporation's long-term objectives. Once plans are put in motion, the board needs to ensure that it has a reliable means to assess the corporation's ongoing performance, while monitoring external conditions that could enhance or jeopardize success. This does not mean that the board should involve itself in the day-to-day operation of the business, which clearly is the responsibility of management. It does mean that the board should develop performance measures that would provide a meaningful indication of business results. When results do not conform to plans, it is the board that must raise questions and require explanations.

A strategic planning committee of the board to carry out the role of reviewing management plans and strategies and recommending these for approval by the full board could, in certain cases, assist it in addressing these concerns.

Appointing board members

10.49 In February 1995 we surveyed chairs and CEOs of Crown corporations on governance matters. The survey results indicate that boards rarely participate in board appointment decisions, although the FAA requires consultation with the board on appointments of chairs and CEOs. Chairs confirmed that the government makes board appointments and renewals with little consultation with the board of directors affected by the appointments, even though consultation might assist government in its appointment process.

10.50 Exhibit 10.6 provides the overall results of the governance survey. It should be noted that these results reflect the views of the chairs and CEOs and we have carried out no additional studies to confirm the results of this survey.

10.51 In our 1993 Report we recommended that boards establish board member profiles. The profile is intended to identify the skills and attributes most needed in board members to establish a strong board. Our survey revealed that very few boards have developed these profiles. We encourage ministers to support boards in establishing profiles, with the objective of identifying criteria that can be used to help ensure the appointment of the best possible members for each board.

10.52 The majority (71 percent) of Crown corporations we surveyed indicated that the government needs to speed up the process for filling board vacancies (i.e. appointing and renewing the appointment of directors). We have previously encouraged the prompt replacement of retiring directors to ensure the continuity, strength and stability of boards. We recognize the uncertainty created by board

“Board appointees need to be given clear instructions regarding their roles and responsibilities prior to accepting their appointments.”
– CEO, Crown corporation

Exhibit 10.6

Corporate Governance Questionnaire

76% of Crown Corporations Surveyed Responded
(31 of 41 Surveyed)

	Agree (percent)	Neutral (percent)	Disagree (percent)	Don't know (percent)
1. a) Governor in Council appointments to vacant board positions are timely.	23	3	74	
b) During the past year, improvements to the timeliness of Governor in Council appointments have been noted.	16	23	54	7
c) Board members understand their roles and responsibilities.	68	13	19	
d) During the past year, improvements to the board's understanding of its roles and responsibilities have been noted.	65	29	6	
e) Management provides the board with the information it requires to carry out its responsibilities.	87	13		
2. a) The board participates in corporate strategic planning and decision making to the extent it deems necessary.	90	7	3	
b) The board plays an important role in monitoring the performance of management.	87	3	10	
3. a) Communication between the board and minister is appropriate.	52	32	16	
b) Communication between the board and management is appropriate.	91	3	6	
c) Board members' attendance at meetings is adequate.	91	3	6	
d) The frequency of board meetings is satisfactory.	91	3	6	
4. a) The board has the right composition of members.	45	23	29	3
b) The board assesses the performance of its members.	13	19	65	3
c) The board is involved (through board member profiles or recommendation) in the appointment of new members.	13	10	64	13
d) The board knows what the composition of its membership should be.	35	29	33	3
e) The board has the right number of members.	65	16	16	3
5. I am satisfied with the quality and extent of financial and performance reporting (i.e. annual report and corporate plan summary) to Parliament.	90	3	7	

vacancies, and encourage government to streamline processes for making and announcing new appointments to boards.

Training for directors

10.53 In our 1993 Report we suggested the development of information sessions for Crown corporation board members on

their roles and responsibilities. Feedback from chairs and CEOs who attended the corporate governance conference sponsored by the Crown Corporations Directorate and the Conference Board of Canada in October 1994 indicated that new board members often join boards without a good understanding of what the

shareholder expects of them, or of the organization as a whole. Many Crown corporations provide new board members with briefing sessions to help them understand their business operations. In light of the many new appointments to boards, we urge boards of directors to improve orientation and education for recently arrived colleagues. Workshop sessions could draw on a variety of qualified resources such as experienced Crown corporation directors, government representatives and governance advisors.

Improving board/government communication

10.54 After corporate plans are submitted by the board to the minister, they are provided to Treasury Board for government approval. When government (Treasury Board Secretariat or ministers' offices) requires clarification or requests a different course of action, corporate management is generally the contact point for the corporation. Perhaps greater board involvement in this process, especially for issues related to planning and reporting, would make the board more aware of its responsibilities in these areas. Furthermore, the board would more likely feel able to carry out the strong role assigned to it in legislation.

Assessing management performance

10.55 While the chief executive officer is neither appointed nor removed by the action of the board, the board should provide to government periodic assessments of the performance of the CEO if it is to maintain the role of oversight of management. If the board feels it does not receive the information it needs to carry out its duties, including, for example, information on performance, it should consider this as a factor in the assessment. The board has the responsibility to do what is required to enable it to perform its overall responsibilities as set out in the FAA.

Establishing mechanisms for rewards and sanctions

10.56 We noted in 1993 a number of factors inhibiting performance reporting, including the fact that there were few incentives to comply, and few sanctions for not complying, with basic accountability reporting requirements. The situation has not changed much. However, we have noticed an increased interest by corporations in improving their reporting, with, among other factors, the introduction last year of the *Auditor General Award for Excellence in Annual Reporting*. We will be continuing this award for at least four more years but encourage government to set out rewards and sanctions relating to the measurement and reporting of Crown corporation performance. It is in the interests of the corporation, government and Parliament to have the information necessary to determine if Crown corporations are fulfilling their public policy roles set out for them.

10.57 While the preceding paragraphs have focussed on the issues arising out of special examinations, the following paragraphs deal with a number of separate matters affecting Crown corporations, and represent an update of the Office's views and positions.

Crown Corporation Debt

10.58 Over the past five years, Crown corporations have increased borrowing from private sector lenders to fund asset growth. Although the government may not explicitly guarantee all the indebtedness of its Crown corporations, indirectly the Government of Canada, as the sole shareholder, is seen to be ultimately responsible for this debt.

10.59 Lenders provide a form of discipline to borrowers through interest rate structures: the more risk, the higher the interest rate. Governments are also subject to this discipline but, once established for government, the preferred

rates are generally available to Crown corporations.

10.60 The growth in debt of Crown corporations has resulted in considerable pressure on the debt-servicing ability of the Crown corporation portfolio (see Exhibit 10.7), and earnings have not kept pace with the growth in debt.

10.61 As corporation debt increases, corporate treasury functions become more critical in ensuring the proper management of that debt. The debt market is becoming increasingly more complex, with derivatives, for example, being used by more treasury groups. In light of the many recent public and private sector instances where derivative trading has caused failures of organizations, boards and government need to consider how to distinguish speculative derivative trading from good risk management practices and ensure that practices minimize risks.

Income Tax for Crown Corporations

10.62 Some Crown corporations are subject to income tax while others are not. In our 1986 Report chapter on income tax expenditures, we said that some Crown corporations that were subject to income tax were able to bypass the normal parliamentary budgetary processes and obtain additional funds through the tax system. In addition, tax information was

not available from Revenue Canada for Parliament to scrutinize the activities of Crown corporations, because of the confidentiality provisions of the *Income Tax Act*.

10.63 We raised these concerns then because they represented anomalies in a system meant to place Crown corporations on more equal footing with private sector corporations. We continue to question the rationale for applying income tax to Crown corporations. For example, at present, corporations dependent upon parliamentary appropriations may be subject to income tax on those appropriations although they are unlikely ever to have to pay tax. Nevertheless, they must file returns.

10.64 Perhaps it is time for the government to assess the applicability of income taxes compared with alternative ways of sharing in the profits of Crown corporations. Administrative costs to the corporations and Revenue Canada related to filing and assessing complex corporate income tax returns, for example, could be eliminated if the government opted simply to withdraw cash in the form of dividends.

Exempt Status of Crown Corporations – Follow-up

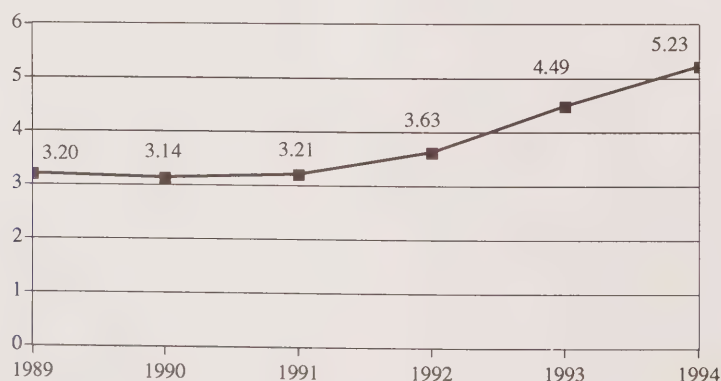
10.65 In 1991 we noted that it would be beneficial if many of the provisions of Part X of the *Financial Administration Act*, particularly those relating to

Exhibit 10.7

Ratio of Debt to Equity

The debt-to-equity ratio increase is an indication of debt leverage and increased risk.

Debt ÷ Equity



management responsibility, accountability and audit, were applied to those responsible for managing and monitoring corporations that are exempt from the Act. We recommended that the status of all exempt Crown corporations be clarified and, to the extent possible in view of their specific needs, brought into line with other Crown corporations.

10.66 Recently a number of private members' Bills have attempted to address this issue, as it continues to be questionable to exempt corporations from basic government accountability requirements, especially when support is provided by way of parliamentary appropriations. In the past five years alone, over \$2.9 billion has been provided to these corporations (excluding the Canadian Broadcasting Corporation, for which most of the accountability provisions applicable to other Crown corporations are included directly in the *Broadcasting Act*).

10.67 While we are not aware of any problems in these corporations that might have been avoided had they been subject to Part X of the FAA, the corporations carry out important commercial functions and public policy objectives but are not subject to the corporate plan approval process, to reporting on performance or to special examinations; nor is our Office eligible to be appointed as auditor or joint auditor where not already appointed, as would be the case if they were classed as Schedule III-I corporations.

Accounting for Appropriations – Follow-up

10.68 In each of our 1989 and 1991 reports, we expressed a concern that there were inconsistencies in the way a number of Crown corporations were accounting for parliamentary appropriations. We were concerned that a basic accounting principle, that "like things should be accounted for in a like manner," was not

being followed. As a result, annual financial statements were not as useful as they should have been for assessing stewardship and financial operating performance, and comparisons among Crown corporations were made less valid.

10.69 Although a number of improvements have been made during the last few years, several Crown corporations continue to report operating appropriations as revenue in the statement of operations, instead of as a segregated non-revenue item. This is inconsistent with the majority of corporations and, in our view, inappropriate.

10.70 Revenue is generally defined as the amount earned in a period as a result of the sale of products or services to third parties. Amounts received from the shareholder to fund operations are not consistent with this widely accepted definition and, therefore, in our view should not be considered revenue. The treatment of appropriations as revenues distorts the net operating results for the period, since they reflect not only results of operations but also funding provided by the shareholder. Consequently, the operating performance of the corporation is more difficult to assess, particularly when compared with other corporations.

10.71 We encourage those corporations to address this reporting issue, to improve the usefulness of the information communicated in financial statements.

Conclusion

10.72 Our special examinations of Crown corporations indicate that in many cases their mandates and objectives are not clearly understood and reported. Without a clearer focus, linking corporate activities to objectives becomes difficult. Under these conditions, the government runs a risk of failing to provide services or products that these corporations were initially intended to provide. Also, reporting on the extent to which objectives

Exempt Crown corporations should be brought into line with other Crown corporations, where possible.

are achieved becomes more difficult to do. Even when clear and meaningful objectives are provided, performance reported in relation to them is often inadequate. Particularly now, when many Crown corporations must react to reduced financial support, they must ensure that they continue to provide required services at a reasonable cost, and Parliament and government must be able to tell whether they are doing so.

10.73 Crown corporations continue to serve an important public role that routinely affects most, if not all, Canadians. We believe that Canadians are generally well served by the framework governing the activities of such corporations. As we have reported previously, in our view the control and accountability framework set out in Part X

of the *Financial Administration Act* is a sound legislative framework and one that has been working well over the 11 years it has been in force. A much improved situation exists today compared to that which prevailed prior to its introduction in 1984.

10.74 However, it would be wrong to be complacent: continuing attention needs to be focussed on achieving greater clarity of corporate objectives and much improved reporting against those objectives. **Notwithstanding the complexities with which Crown corporations must contend, we believe that this can, and should, be achieved through improved corporate governance involving all parties: Parliament, government, boards and management.**

Audit Team

Denis Scott
Norah Roberts
Olga Dupuis

For further information, please contact Grant Wilson, the responsible auditor.

Appendix: Special Examinations

What are special examinations?

10.75 The mandate for special examinations is set out in Part X of the *Financial Administration Act*. All parent Crown corporations named in Schedule III of the Act, and their wholly owned subsidiaries, are subject to a special examination. The first five-year cycle of special examinations commenced on 1 September 1984, and the results were reported in Chapter 6 of our 1990 Report. Subsequent special examinations must be conducted within five years of the date of completion of the preceding examination.

10.76 The special examination, a type of value-for-money audit, serves to provide an independent opinion to the board of directors on whether the corporation's financial and management control and information systems and management practices were maintained in a manner that provided reasonable assurance that:

- the assets of the corporation were safeguarded and controlled;
- the financial, human and physical resources of the corporation were

managed economically and efficiently;
and

- the operations of the corporation were carried out effectively.

10.77 Number of Crown corporations subject to special examinations.

Forty-three Crown corporations were subject to a special examination during the second cycle (see Exhibit 10.8); these were 42 of the 48 parent Crown corporations listed in Schedule III of the *Financial Administration Act* (FAA) and their wholly owned subsidiaries, and one wholly owned subsidiary obliged to report as a parent Crown corporation. Of the remaining six parent Crown corporations, one was dissolved in 1995 and five are exempt from Part X of the FAA and are not required to undergo special examinations. This Office carried out 34 of the examinations as either sole or joint examiner (31 of these were completed at the time of going to press), and nine were conducted solely by private sector practitioners.

10.78 Only 17 of the 31 completed special examinations were conducted solely by this Office in both cycles. The others are either corporations where the first cycle was carried out by private sector practitioners or corporations that only in the second cycle were subject to an examination for the first time. In one case the Office was the sole examiner in

	OAG	Joint Office/ Private Sector	Private Sector	Total
First Cycle	29		17	46
Dissolved/Divested Corporations	(9)		(2)	(11)
Change of Examiner as per FAA	3	3	(6)	0
New Crown Corporations and Special Examinations	8			8
Second Cycle				
Subject to Examination	31	3	9	43
Not Yet Completed	(3)			(3)
Completed and Reported	28*	3*	9	40

*Results discussed in the chapter

Exhibit 10.8

Crown Corporations Subject to Special Examinations

the first cycle and became a joint examiner in the second cycle. It may not be appropriate to make direct comparisons between the two cycles without recognizing these differences.

10.79 The results discussed in the chapter are based only on the examinations carried out by this Office. For a number of years, however, we have shared information with private sector practitioners. This has led to increased consistency among examiners in the general approaches followed and in the form of reporting used.

What is their nature?

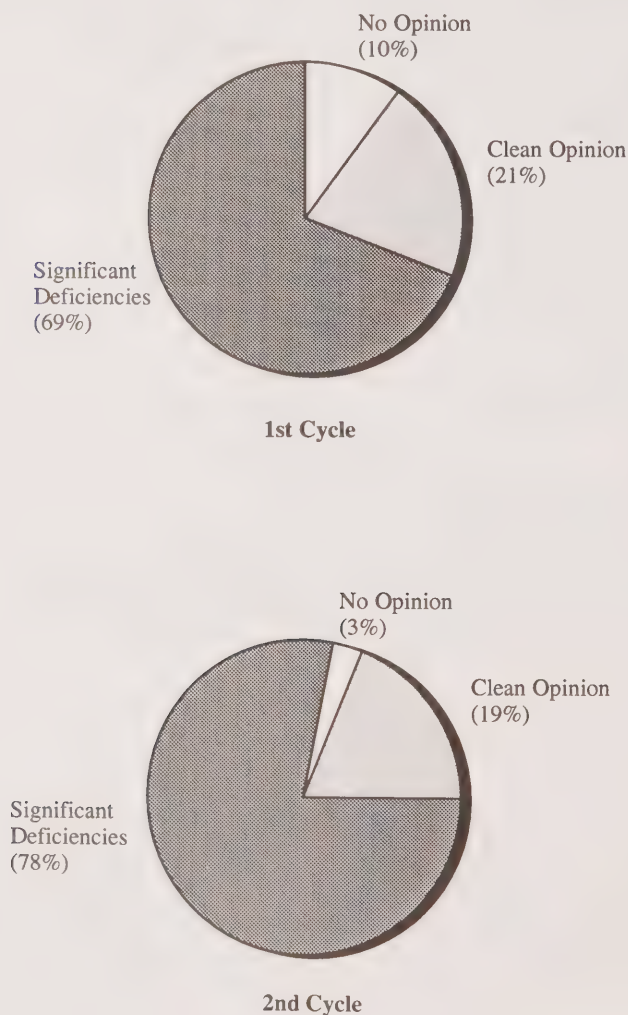
10.80 Exhibit 10.9 sets out the types of opinion reported in both cycles of special examinations. In the second cycle, six cases had a "clean" opinion: that is, no significant deficiencies were reported. One had no opinion, as the corporation essentially was not operating. The special examination reports on 24 corporations included one or more deficiencies that we, the examiner, considered significant.

To whom are examinations reported?

10.81 When the special examination report contains information that, in the

Exhibit 10.9

Form of Opinion of Special Examination Reports



examiner's opinion, should be brought to the attention of the appropriate minister or Parliament, the examiner may do so only if the Crown corporation is named in Part I of Schedule III of the *Financial Administration Act*. In the second cycle of special examinations there was a considerable increase in the percentage of special examination reports provided to the minister (see Exhibit 10.10).

10.82 The reasons for the increase are varied. Because corporations subject to examination in the second cycle were larger and more complex, their issues were more likely to warrant ministers' consideration. In addition, some reports were provided to ministers because they discussed matters that were beyond the corporation's ability to address (for example, mandate interpretation), while others contained significant deficiencies

that had not been addressed adequately since the completion of the first cycle.

What significant deficiencies were reported?

10.83 Examining all systems and practices in detail is impractical and costly. Therefore, based on a thorough understanding of the corporation and its operating environment, the examination concentrates on areas of the corporation where any deficiencies that might exist could be significant. The areas that the Office most frequently selected for in-depth review in the second cycle are shown in Exhibit 10.11. This exhibit also shows the number of corporations where significant deficiencies were found in these areas.

10.84 "Corporate and strategic planning" includes management interpreting the corporate mission or

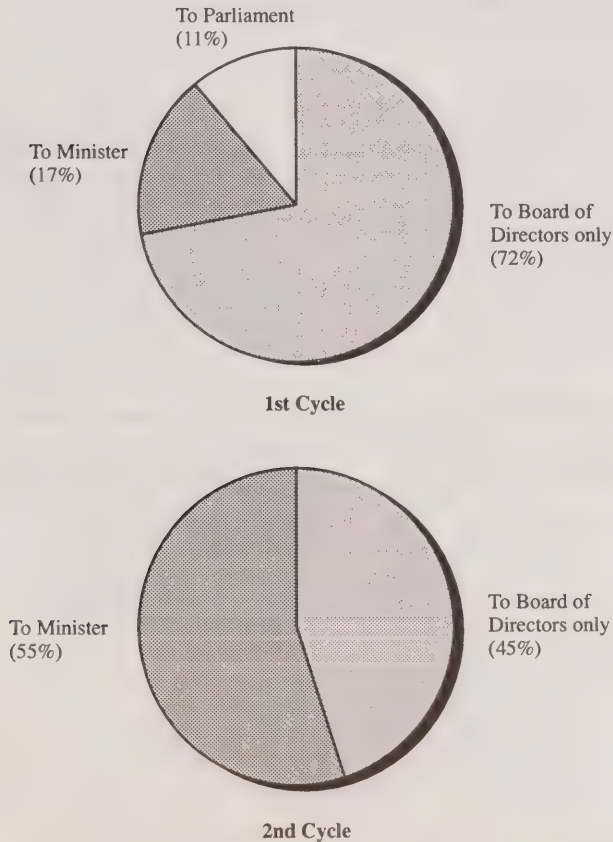


Exhibit 10.10

Where Significant Deficiencies Were Reported

mandate and prioritizing corporate activities. In addition to the deficiencies in planning and performance measurement and reporting discussed in the chapter, other deficiencies were found in the areas of operations, human resource management and asset management. Operations include all operational processes that relate to a corporation's core activities, such as operational planning, production, and product or service delivery. Human resource management relates to activities such as recruiting, training, succession planning, and collective bargaining practices. Asset management includes facilities management, maintenance and security of intellectual and physical property.

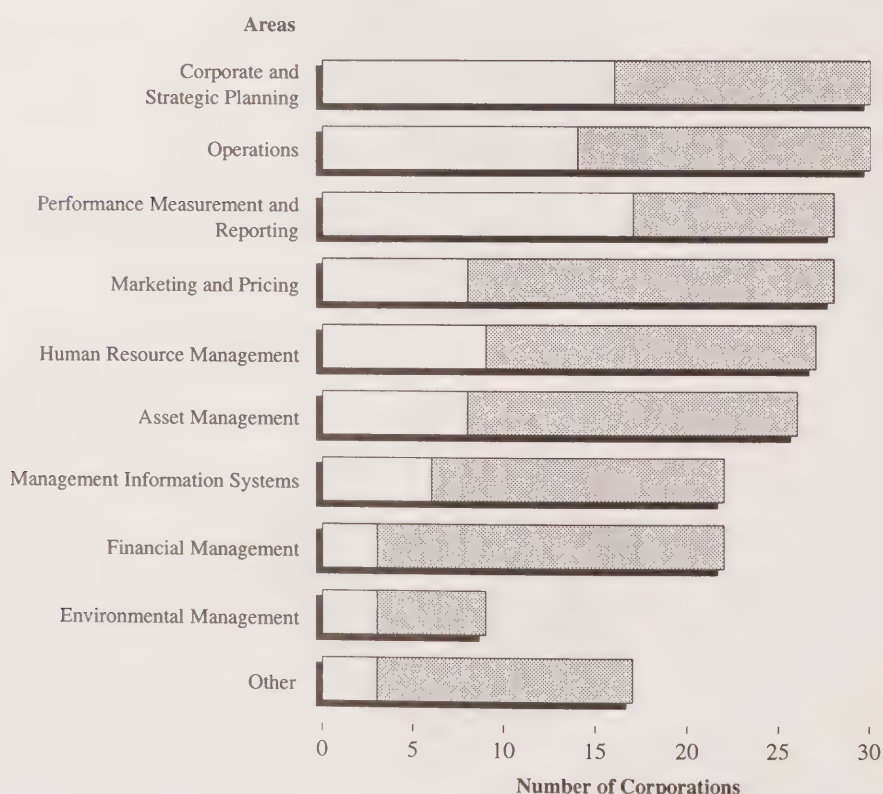
10.85 Significant deficiencies in these areas include operational plans and current activities that are not linked to the strategic plan; collective agreements that are not in line with operational realities; and inadequate systems and practices for safeguarding and protecting real property

assets. Other areas where only a few corporations had significant deficiencies include marketing and pricing, management information systems, financial management, and environmental management.

10.86 Exhibit 10.12 classifies significant deficiencies under the areas of effectiveness of operations, economic and efficient management of resources and protection of assets. These are the statutory objectives that corporations are required to achieve and against which the special examination measures. The heading "assets not safeguarded and controlled" includes significant deficiencies such as inadequate maintenance of physical assets and poor management and protection of intellectual property. Under the heading "resources not managed economically and efficiently" are significant deficiencies such as poor identification of raw material availability; unresolved environmental risks and exposures; and lack of systems

Exhibit 10.11

Areas Most Frequently Selected for In-depth Examination and Significant Deficiencies in Those Areas



to measure, monitor and provide feedback on operating performance (for example, productivity and use of resources) and profitability.

10.87 The heading “operations not carried out effectively” includes matters such as unclear objectives and strategies; inadequate measurement and reporting of the extent to which objectives/goals were attained; and inadequate information on costs and results to allow for effective implementation of key strategies.

10.88 Resolution of deficiencies in the area of effectiveness of operations often requires the involvement of a number of parties, some of whom are outside the corporation. We have reported these deficiencies in the chapter. However, we believe that some significant deficiencies related to effectiveness of operations, as well as matters affecting safeguarding and controlling of assets and management of resources, can be resolved effectively by the corporation itself.

What was the extent of reliance on internal audit?

10.89 In carrying out a special examination, the examiner is required to rely, to the extent considered practicable, on internal audit carried out in the corporation. This means using internal audit work to replace work the examiner would otherwise have to perform to

provide the evidence required to support the opinion expressed. Exhibit 10.13 shows the extent of reliance and non-reliance on internal audit, as well as exemptions. Although the overall percentage of special examinations involving reliance increased in the second cycle, the extent of reliance overall decreased.

10.90 We were not able to capitalize as much as we had hoped on the work performed by internal auditors. We noted in our 1990 Report that we anticipated working closely with corporations’ internal auditors and placing extensive reliance on their work for second cycle special examinations. However, since the first cycle, internal audit functions in many corporations have decreased in size due to corporate restructuring and downsizing, which limited the extent to which we could use their work. Also, the shortened time frame for special examinations as well as our increased orientation on results limited the opportunities to increase reliance.

10.91 In five cases we placed no reliance on internal audits, either because the scopes of the audits were not consistent with those of the special examinations or because no internal audit work carried out by the corporations was comparable to special examination work. One corporation was inactive and winding down; six others had received exemptions

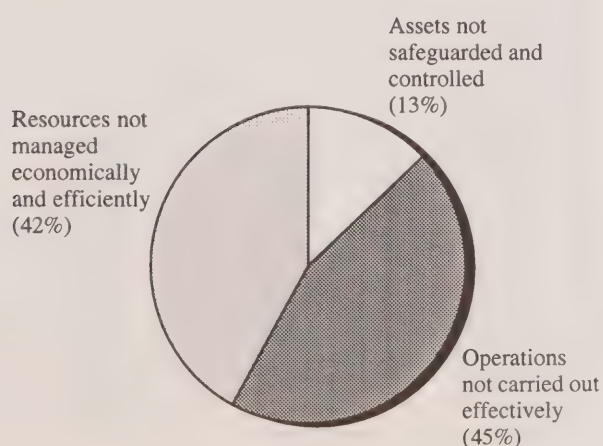


Exhibit 10.12
Types of Significant Deficiencies

from the requirement to carry out internal audits. Exemptions are given by Governor in Council when it is believed, primarily because of the corporation's size or the nature of its activities, that the costs of such audits would outweigh the benefits.

What was their duration, timeliness, and scheduling?

10.92 The average duration of a first cycle special examination was 19 months. Five examinations where projects were carried out sequentially took more than two-and-a-half years to complete. In the second cycle, a number of Crown

corporations were undergoing their first special examination, or the first conducted by this Office. Second cycle examinations have averaged 14 months, and all but one have taken less than two years to complete (see Exhibit 10.14). This improvement is a direct result of scheduling projects in an examination concurrently rather than in sequence, as was often done during the first cycle. The shorter duration has reduced the costs to corporations for their participation in the audit and has also made possible better resourcing by our Office.

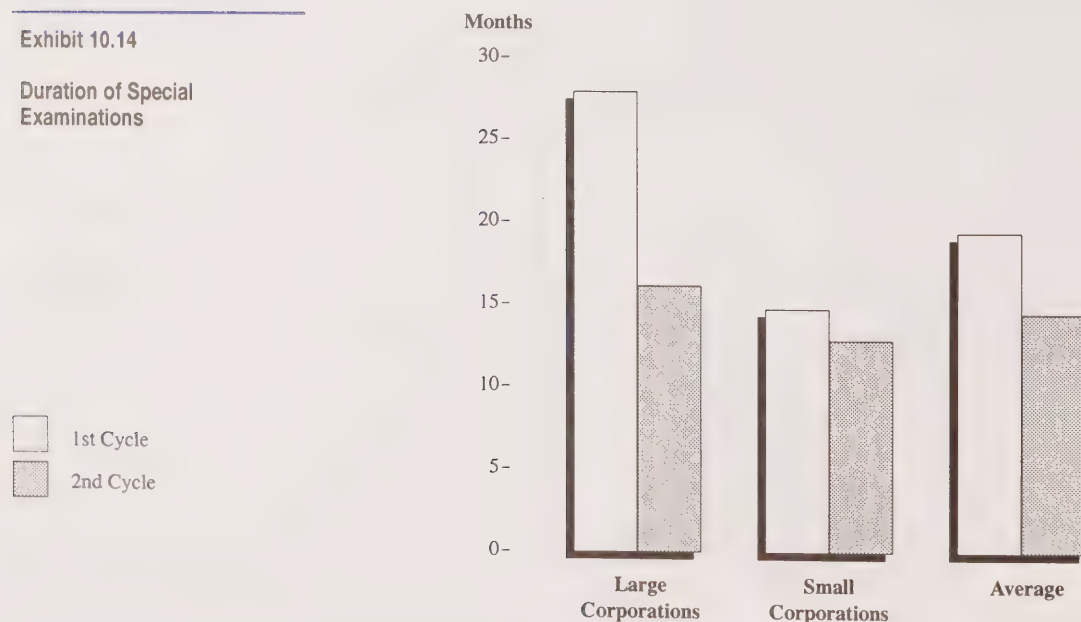
Exhibit 10.13

Reliance on Internal Audit

	First Cycle		Second Cycle	
	Number of Special Examinations	Percentage of Total	Number of Special Examinations	Percentage of Total
Extensive reliance on internal audit	7	24	2	6
Limited reliance on internal audit	4	14	17	55
No reliance	9	31	5	16
Exempt or inactive corporations	9	31	7	23
Total	29	100	31	100

Exhibit 10.14

Duration of Special Examinations



10.93 As in the first cycle, timeliness and scheduling are still a problem. More than one third of the final examination reports were submitted to boards just after the deadline required by the *Financial Administration Act*. This was due mainly because special examinations are often scheduled near the end of the five-year examination cycle and board meetings are not always scheduled for the same time as the reports are finalized.

10.94 Although the second cycle will have spanned more than seven years (September 1989 to December 1996), 91 percent of active corporations were examined during the two-year period ending November 1994. The timing of both cycles is illustrated in Exhibit 10.15. This has been an administrative problem for our Office, as we have had to supplement our staff with outside consultants to meet the peak demand.

10.95 So far, corporations have initiated the scheduling of special examinations and, understandably, they have tended to wait until previous significant deficiencies have been corrected or until reorganizations or other internal initiatives

have been completed. However, we hope that with Crown corporation support and flexibility, and with a further reduction in the average duration of special examinations, we can optimize the scheduling of third cycle examinations to meet the statutory deadline and also continue to reduce costs. We therefore intend to contact certain corporations in the near future to discuss the scheduling of their third cycle special examinations.

What did they cost?

10.96 Costs of individual special examinations carried out by this Office are included in our annual Report in the year they are completed, and costs of those carried out by private sector practitioners are provided to the President of the Treasury Board. As was the case in the first cycle, special examination costs varied considerably: from less than \$100,000 for small corporations to over \$1 million for large and complex corporations. While the average cost of the 17 repeat examinations completed has remained constant at \$ 429,000, the overall average cost for second cycle

Number of
Examinations

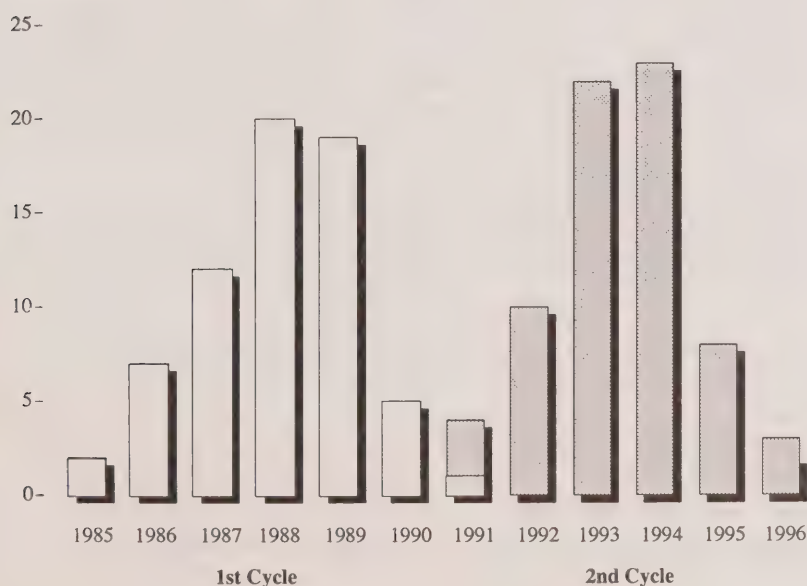


Exhibit 10.15

Timing of Special Examinations

examinations increased from \$435,000 to \$585,000 due to the following factors:

- nine small to medium corporations (with average first cycle costs of \$231,000) were privatized or dissolved and therefore were not subject to a second cycle examination; and
- fourteen second cycle examinations of medium to large corporations (with average second cycle costs of \$805,000) were carried out for the first time by this Office.

What is their value?

10.97 In the second cycle we sought to build on the experience gained during the first cycle to increase the efficiency of special examinations and their “value added” to corporations. One major improvement was the change in the focus of the examination to whether there was reasonable assurance that desired results were being achieved (ultimately, whether assets were safeguarded, resources were managed economically and efficiently and operations were carried out effectively) more than whether ideal processes were in place for individual systems and practices.

10.98 This meant changing from a process-based or systems-based approach to more of a results-based approach in our audit, which is more in line with managers’ and directors’ interests. It also meant asking the questions *What’s the impact?* and *So what?* whenever a potentially significant deficiency was noted. The impact had to be important for the deficiency to be considered significant and included in the special examination report.

10.99 Crown corporation chairs and CEOs were surveyed in February 1995 to seek their views on special examinations (other results from the survey are provided in Exhibit 10.16). Responses were provided by 24 of 32 corporations, with the majority supporting the need for special examinations. Indeed, 83 percent

of responding corporations felt that the assurance given by the auditor’s opinion in the special examination report was of benefit to the board of directors; 71 percent felt that, overall (taking into account the benefits and costs to the corporation and the costs to this Office), the special examination had been worthwhile. Twelve percent were neutral and the remaining 17 percent felt that the examinations were not worthwhile.

10.100 Some respondents said that the examinations had been worthwhile because they provided an independent review of the corporations’ operations, and at times instigated a rethinking of the way they do business. Many chairpersons saw the process as important in helping the board of directors hold management to account. The neutral and negative responses cited concerns about the length of time to complete a special examination, the time and costs to the corporation and the costs to this Office and thus to taxpayers.

What are the implications for the third cycle?

10.101 Based on almost two completed cycles, we also believe that special examinations are helping to make a difference in the overall control and accountability of Crown corporations. Furthermore, we expect the third cycle of special examinations to provide even greater value to the corporations.

10.102 The third cycle of special examinations will begin in early 1997. We have learned a great deal from our experiences in the first two cycles and from our survey of Crown corporations. We anticipate achieving greater efficiencies in third cycle special examinations and providing greater value to Crown corporations by concentrating our efforts on the following areas:

- emphasizing performance measurement and reporting;

Exhibit 10.16

Special Examinations
QuestionnaireResponses from 24 of 32 Crown
Corporations Surveyed

	Agree (percent)	Neutral (percent)	Disagree (percent)
1. a) The assurance given by the auditor's opinion in the examination Report is of benefit to the board.	83	4	13
b) Overall, the special examination was worthwhile (taking into account the value added to the corporation including the assurance given by the examiner's opinion, the management letter(s), the time invested by employees in the process and the cost to the Office).	71	12	17
2. a) Reported significant deficiencies were considered significant by the corporation.	61	22	17
b) It was appropriate for the examiner to provide the minister with a copy of the examination report.	81	6	13
c) The board was of the view that additional significant deficiencies existed.	5	5	90
d) The special examination report disclosed information not already known to the board (i.e. significant deficiencies).	19	19	62
3. The duration of the special examination from start to finish was reasonable..	50	4	46
4. a) The cost to the corporation (time spent by staff members) for the examination was reasonable.	46	21	33
b) The cost to the corporation of the recent special examination was less than the first one.	59	23	18
c) The examination audit team was competent and knowledgeable.	87		13
5. The frequency of special examinations is adequate (once every 5 years).	58	13	29

- improving the analysis of risk that helps to identify the areas to be examined in depth;

- improving the scheduling of special examinations to avoid peak periods and their related costs;

- reducing the average duration of special examinations, thereby reducing time and cost requirements of Crown corporations; and

- reducing the cost of special examinations while considering ways to increase their value to Crown corporations.

10.103 The Office will continue to build on the lessons learned in the first and second cycles of special examinations and to improve the way examinations are carried out, to provide even greater value to corporations, government and Parliament in the third cycle special examinations.

Report of the Auditor General of Canada to the House of Commons – 1995

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Report of the
**Auditor General
of Canada**
to the House of Commons

Chapter 11
Environmental Management Systems:
A Principle-based Approach

October 1995

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Auditor General
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A Principle-based Approach**



October 1995

This October 1995 Report comprises 8 chapters and a Foreword and Main Points. In order to better meet clients' needs, the Report is available in a variety of formats. If you wish to obtain another format or other material, the Table of Contents and the order form are found at the end of this chapter.

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Chapter 11

Environmental Management Systems

A Principle-based Approach

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Environmental Management Systems

A Principle-based Approach

Assistant Auditor General: Robert R. Lalonde

Responsible Auditor: Wayne Cluskey

Main Points

11.1 The purpose of this report is to identify the elements of a good environmental management system; to identify key practices of good environmental management; and to describe the roles and responsibilities of the Treasury Board Secretariat and Environment Canada, and results of activities undertaken by them, in identifying and communicating good practices for successfully implementing environmental management systems.

11.2 The International Organization for Standardization (ISO) defines an environmental management system (EMS) as “that part of the overall management system which includes organizational structure, planning activities, responsibilities, practices, procedures, processes, and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy.” A properly designed EMS will provide the framework for practices designed to help an organization manage its environmental agenda and document and communicate its environmental performance. Organizations implementing environmental management systems (EMS) can learn from the practices and experiences of other organizations that have already begun implementing an EMS. This report highlights some of those practices.

11.3 This Office can also learn from the practices of other organizations. We intend to use the knowledge we have acquired about environmental management systems in our future work on environment and sustainable development issues.

11.4 Federal departments and agencies are responsible for managing their own environmental risks and responsibilities. To assist and guide federal departments and agencies, the Treasury Board Secretariat issues guidance documents that include policies, directives and guidelines. Departments and agencies then apply that guidance. Environment Canada is responsible for administering legislation related to the environment as well as providing technical assistance to departments and agencies in environmental matters.

11.5 An organization may decide to pattern its environmental management practices on one of many existing environmental management models. Sound environmental management principles are not different from good management principles. The exact content of a particular management model is not as important as the principles it embodies. One principle-based environmental management systems model that is gaining international acceptance is ISO 14004, currently being drafted by the International Organization for Standardization.

11.6 The private sector organizations we interviewed were selected on the basis that they had or were likely to have good environmental practices. They were generally further advanced than the federal departments and agencies in implementing comprehensive environmental management systems. Nevertheless, very few of the organizations we interviewed in either the private or the public sector have developed fully all of the elements of an environmental management system. The federal government has taken steps, through initiatives such as the Environmental Accountability Partnership, to improve its environmental management practices.

11.7 An EMS model provides only the starting point from which to build an effective environmental management system. Continual improvement of the organization’s environmental performance is ultimately what is most important.

Introduction and Background

Why Environmental Management Systems Are Important

11.8 The International Organization for Standardization (ISO) defines an environmental management system (EMS) as follows:

Environmental Management System (EMS) — that part of the overall management system which includes organizational structure, planning activities, responsibilities, practices, procedures, processes, and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy.

11.9 A properly designed EMS will provide the framework for practices designed to help a department or agency manage its environmental agenda and document and communicate its environmental performance. An EMS will help organizations ensure that major environmental risks and liabilities are properly identified, minimized and managed. At a minimum, an EMS helps departments and agencies ensure that operations are conducted in compliance with environmental laws.

11.10 On 25 April 1995, the Minister of the Environment tabled in the House of Commons proposed amendments to the *Auditor General Act* concerning the establishment of the Commissioner of the Environment and Sustainable Development. These amendments include the requirement for ministers of departments to table in Parliament, no later than two years after the amendments

to the *Auditor General Act* come into force, sustainable development strategies and action plans to implement them. The Government has directed departments to report in Part III of their Estimates on their progress in meeting the objectives and implementing the plans set out in the strategies.

11.11 The federal government's *A Guide to Green Government*, issued in June 1995, provides guidance to departments in preparing their sustainable development strategies, including the operational component. The Guide refers to the Greening of Government initiative, which includes a recommendation to implement environmental management systems (EMS).

11.12 In much the same way that financial auditors rely, at least to some extent, on financial management systems as part of their audit work leading to an opinion on financial statements, this Office would like to place some reliance on environmental management systems when carrying out its work on sustainable development strategies as well as on certain other environmental issues.

Objectives of Study

11.13 This study had five objectives:

- identify the key elements of a good environmental management system;
- identify key practices of good environmental management, based on our review of the literature and interviews with private and public sector practitioners and managers;
- describe the roles and responsibilities of the Treasury Board Secretariat and Environment Canada, and results of activities undertaken by them, in identifying and communicating good practices for successfully implementing environmental management systems;

An Environmental Management System helps ensure that operations are conducted in compliance with environmental laws.

- identify and review the usefulness of existing tools/methodologies for assessing EMS; and
- develop or adapt a questionnaire based on the above for the assessment of environmental management systems and test it on a sample of federal departments to determine its usefulness and to fine-tune its design.

Study Scope and Methodology

11.14 In September 1994, we began our study by reviewing the proposed EMS standards of organizations such as the Canadian Standards Association (CSA), the International Organization for Standardization (ISO) and the British Standards Institute (BSI). As part of our review, we included related publications by academics, professional associations and management consulting firms. We also reviewed several other environmental management approaches currently practised by private and public sector organizations (see Appendix I).

11.15 From the outset of our study, we decided not to restrict ourselves to any particular EMS model. It is the principles that are important, and similar principles are used in most of the EMS models we studied. However, to provide a framework for our interviews and analysis we selected ISO 14004, a guidance document for environmental management systems produced by the International Organization for Standardization. Although it has not yet been ratified formally, it is already gaining international acceptance. A companion document, ISO 14001, is a specification document that is prescriptive and contains only those elements of an EMS that can be audited objectively for certification purposes.

11.16 Our review focussed on good environmental management practices and impediments to them in public and private sector organizations in Canada, Europe and the United States. We interviewed consultants, specialists and members of standard-setting bodies in the private and the public sectors to identify good EMS practices and to understand the role and importance of the various elements of the environmental management systems in their respective organizations. Our selection of organizations to interview was based on each organization's environmental responsibilities, the nature of its business and its willingness to be interviewed. A list of the 36 organizations is included in Appendix II.

11.17 Our study was intended to identify key elements and practices of good environmental management, not to come to a conclusion about the general state of environmental management. Accordingly, we selected for our private sector interviews organizations that have been recognized by peers, standard-setting bodies and professional societies as having or likely to have good environmental practices. Three provincial Crown corporations that had been referred to us as good environmental practitioners were included as part of our private sector analysis because of their commercial operating environment. In each organization we interviewed environmental managers who gave us a perspective on the practical problems they faced in developing and applying an EMS.

11.18 From the public sector, we interviewed Canadian and American government departments and agencies that have begun to embrace the EMS concept by implementing environmental management practices. We conducted in-depth interviews with Canadian federal government officials in seven departments

Our study was intended to identify key elements and practices of an Environmental Management System.

and agencies, including the Treasury Board Secretariat and Environment Canada.

11.19 We also visited two provincial departments, and five U.S. federal departments and agencies. These organizations were interviewed for background information only and were not included in our detailed analysis.

11.20 We also reviewed existing tools and methodologies for assessing EMS and developed, in co-operation with the Federal Committee on Environmental Management Systems (FCEMS), a questionnaire for the assessment of environmental management systems. The questionnaire is based primarily on the ISO 14004 guidance document but also reflects other recognized environmental management practices and the findings of our study.

11.21 A first draft of this questionnaire was tested in one federal department and reviewed by four others. We revised the questionnaire based on their comments and turned it over to the Federal Committee on Environmental Management Systems (FCEMS). The Committee has undertaken to revise the questionnaire further and make it available to all federal departments.

11.22 The questionnaire is a tool to help an organization move toward implementing an environmental management system. It provides advice to federal departments and organizations wishing to improve their environmental management practices, ultimately leading to improved environmental performance.

11.23 We would like to express our appreciation to all those private and public sector organizations who so willingly provided their time, advice and information. Without their assistance, the

completion of this study would not have been possible.

Federal Roles and Activities

11.24 Roles and responsibilities in the area of environmental management systems are shared in the federal government. Individual departments or agencies are responsible for managing their own environmental risks and responsibilities. Under the 1992 Federal Environmental Stewardship initiative, federal departments and agencies have been responsible for developing environmental action plans to indicate how they will meet the commitments made in the Code of Environmental Stewardship (see Appendix III). Environment Canada's Office of Federal Environmental Stewardship has indicated that these action plans could form the basis of more comprehensive action under an EMS framework.

11.25 The Treasury Board Secretariat, within the general context of its responsibilities in the expenditure management system, is the organization responsible for providing general management guidance and directives. It has been active in several aspects of environmental management, promoting environmental auditing and environmental stewardship in the federal government.

11.26 Environment Canada is responsible for administering legislation related to the environment. It is also the federal government's technical expert on environmental matters. It has provided guidance to departments to help enhance their environmental performance through several initiatives. These initiatives have evolved through the years from the Environmental Stewardship initiative to

Individual departments are responsible for managing their own environmental risks and responsibilities.

the recent government initiatives on the “greening of government.”

11.27 Environment Canada’s Office of Federal Environmental Stewardship promotes the “greening of government operations” by providing tools and information to assist departments in making their operations more environmentally responsible. The Office hosts workshops on topics ranging from environmental assessment and waste reduction to environmental recognition programs and “green” printing. The Office also supports environmental projects and training programs and promotes environmental stewardship “success stories”.

11.28 The Treasury Board Secretariat, Environment Canada, Industry Canada, Public Works and Government Services Canada, the Canadian International Development Agency, and the Office of the Auditor General of Canada have all contributed to the development of environmental standards through their involvement with bodies such as the Canadian Environmental Council, the Canadian Standards Association (CSA) and the Canadian Institute of Chartered Accountants. Specifically, Environment Canada has been active with the technical committee for the CSA’s voluntary guidelines on environmental management systems; and it provided input to the Society of Management Accountants (SMAC) Accounting Guideline *Implementing Corporate Environmental Strategies*.

11.29 The Treasury Board Secretariat and Environment Canada have created an Environmental Accountability Partnership (EAP). The EAP Steering Committee is co-chaired by senior officials from the Treasury Board Secretariat and Environment Canada and includes members from six other federal

departments. The Steering Committee may create working groups to address environmental issues as required. At the present time, there are seven EAP working groups. Federal roles in environmental management for government operations are summarized in Exhibit 11.1.

11.30 The Federal Committee on Environmental Management Systems (FCEMS) works to identify and overcome common barriers and share experiences and best practices in the implementation of environmental management systems. This committee also focusses on the important role of environmental management systems in effective risk management. The FCEMS and its member departments have worked closely with the Office of the Auditor General’s EMS study team; we appreciate their contribution to and support for this study.

The Elements and Practices of Environmental Management Principles

Principle-based Models

11.31 Many organizations have been or are affected by dramatic cultural changes, including downsizing, reorganization and new management philosophies. In both the private and the public sectors, several organizations have embraced principle-based management philosophies such as principle-based leadership and total quality management.

11.32 Principle-based management models are not limited to specific practices or activities. According to Stephen Covey, internationally recognized speaker and author on leadership, a practice that works in one circumstance will not necessarily work in another. While practices are specific, principles are

deep fundamental truths that have universal application.

11.33 Environmental management principles provide the framework within which an organization can pattern its environmental management practices. Many existing environmental management models may be used. The exact content of a particular EMS model is not as important as the principles it embodies. Principle-based management systems have the inherent flexibility necessary to make changes associated with evolving conditions. However, the difficulties associated with implementing such systems in those circumstances should not be underestimated.

11.34 Sound environmental management principles are not different from good management principles. Similar to a principle-based management approach, a principle-based *environmental* management approach is both team-driven and oriented toward the improvement of environmental performance. An EMS should be a complementary system to an organization's general management framework, integrated and aligned with the existing management structures wherever possible.

The ISO 14004 Environmental Management Principles

11.35 This section sets out the results of our analysis based on the methodology

The exact content of a particular Environmental Management System model is not as important as the principles it embodies.

Departments and Agencies	Treasury Board Secretariat	Environment Canada
Responsible for managing their own environmental risks and responsibilities.	Responsible for providing guidance and direction on management practices, including environmental management.	Responsible for administering environmental legislation as well as for promoting the Code of Environmental Stewardship and for providing guidance to departments in environmental matters.

Environmental Accountability Partnership (EAP) Steering Committee

Objectives:

1. Act as a catalyst to improve efficiency in government operations through sound environmental practices.
2. Demonstrate the government's environmental leadership consistent with long-term objectives for sustainable development.
3. Improve existing co-ordination and alliances between government departments and help build consensus on environmental accountability issues.

Working Groups of the Environmental Accountability Partnership

Federal Committee on Environmental Management Systems

Federal Building Initiative – Building and Energy Conservation

Water Conservation at Federal Facilities

Emission Reduction in Fleets

Green Procurement

Waste Reduction

Internal Audit

Exhibit 11.1

Federal Roles in Environmental Management for Government Operations

The first step is obtaining commitment from top management.

Commitment must extend to individuals at all organizational levels.

outlined in paragraphs 11.14–11.19. **The purpose of our analysis was to bring out the best practices from various sources as goals to strive for, not as benchmarks for assessing existing practices in the public sector.** Given that the private sector organizations we interviewed were selected because they were considered leaders in EMS development, it cannot be assumed that our observations are representative of the private sector as a whole.

11.36 The environmental management principles as defined by ISO 14004 are:

- How to Start: Commitment and Policy
- Planning
- Implementation
- Measurement and Evaluation
- Review and Improvement

How to Start: Commitment and Policy

11.37 According to ISO, an organization first should focus on what needs to be done. It should ensure its commitment to an environmental management system and define its policy. The principle of commitment and policy provides a starting point for the development of an EMS and consists of the following elements:

- Top management commitment and leadership
- Initial environmental review
- Environmental policy

Top management commitment and leadership

11.38 ISO 14004 draft guidelines state:

To ensure success, an early step in developing or improving an EMS is obtaining commitment from the top management of the organization to improve the environmental management of its activities, products or services. The ongoing commitment and leadership of the top management are crucial.

11.39 It is critical that management put its commitment into operation by participating in environmental activities, defining its responsibilities and establishing the appropriate accountability mechanisms for the organization's environmental performance.

11.40 In the current economic climate of restraint and very limited resources, senior management must genuinely believe in the value of an EMS and be in a position to demonstrate its benefits (financial and otherwise). Where commitment by top management was not visible in the organizations we interviewed and the EMS was promoted and initiated from the bottom up, the EMS did not succeed.

11.41 Commitment must extend beyond the management level to individuals at all organizational levels (see Exhibit 11.2). The Canadian Standards Association states, "It is the commitment of the individuals in an organization that transforms the environmental management system from what otherwise might be simply paperwork into an effective process."

11.42 In our interviews, we found more evidence of senior management awareness

Exhibit 11.2

Senior Management Support

A champion who is committed to the cause is absolutely essential. Not only does management have to be supportive, but it has to create an environment where employees feel comfortable presenting their ideas when they are still crude and unpolished. Then management must strongly encourage the implementation of new ideas, full well realizing that the success rate is never 100 percent.

Senior environmental specialist, a major international corporation

and support for an EMS in the private sector than in the Canadian federal government. The higher level of environmental awareness and support among senior managers in the private sector may be due to the greater risks associated with their operations and the threat of litigation.

11.43 Furthermore, several private sector companies we interviewed recognize that sound environmental management can translate into increased profits for the corporation. Although Canadian federal government organizations may have somewhat different objectives, mandates, and vehicles for raising operating capital, they need to identify opportunities for savings through improved environmental performance. Leveraging environmental investments by demonstrating a positive return on investment appears to be a key to success.

Initial environmental review

11.44 Before considering what the details of the environmental policy might be or how it will be implemented, an organization should conduct an initial review to identify its current position with regard to the environment. That review should cover all aspects of the organization, identifying strengths, weaknesses, risks and opportunities. The results of the review will form the basis for developing policy and setting priorities. The identified risks are then elaborated in the next principle when the organization reviews in detail the scope of its environmental aspects and their associated impacts.

Environmental policy

11.45 Our study of practitioners in the private sector indicates that a comprehensive environmental policy is

one of the most important elements of the EMS model. The environmental policy sets the overall direction and is the common point of reference for developing the subsequent EMS elements. The policy serves to align management and staff with common principles of operation.

11.46 Typically, commitment from senior management is clearly articulated in the environmental policy. Although many major organizations have developed an environmental policy, there is a great variety in what the policy includes.

11.47 We noted some policies that included only vague statements about sound environmental behaviour. These did not provide sufficient direction for the organizations. At the other extreme, some policies were too detailed and would have to be amended too often to accommodate even minor changes in circumstances. The wording of policies should give clear direction to the organization without getting into specifics, which fall under planning.

11.48 Organizations should consider including in their environmental policy a commitment to continual improvement of both the EMS and environmental performance, and provide for setting and publishing environmental objectives. A policy can state which of the organization's activities are covered by the EMS, and indicate how the achievement of the environmental objectives will be reported.

11.49 Some private sector organizations have established additional good practices, including stakeholder consultation and participation in the policy's development; communication of the policy to all stakeholders; emphasizing benefits as well as costs; and periodic review of the policy's relevance and appropriateness.

An organization should conduct an initial review to identify its current position with regard to the environment.

Organizations should consider including in their environmental policy a commitment to continual improvement of both the environmental management system and environmental performance.

11.50 Two of the Canadian federal government departments we interviewed had environmental policies. These policies share the positive attributes of the good policies observed in our sample of private sector organizations.

11.51 Environmental policies also cover a wide range of issues. Most address compliance issues, such as compliance with environmental and health and safety legislation and regulations. More advanced policies deal with questions of due diligence, product stewardship and life cycle management. The most advanced policies address questions of sustainable development. To ensure that the organization supports the implementation of a sustainable development or advanced environmental management policy, an appropriate corporate culture is essential. Exhibit 11.3 illustrates a sustainable development policy.

Planning

11.52 An organization should formulate a plan to fulfill its environmental policy. According to ISO, the elements of planning an environmental management system are:

- Identification of environmental aspects and evaluation of associated environmental impacts
- Legal and other requirements
- Internal performance criteria
- Environmental objectives and targets
- Environmental management program

Identification of environmental aspects and evaluation of associated environmental impacts

11.53 Once an environmental policy is in place (and is supported by senior management and incorporates the observations from an initial review), an organization can complete the identification of specific environmental aspects of its activities, products and services and evaluate their associated impacts. The majority of private sector organizations we interviewed have used this process to establish environmental objectives, targets and priorities consistent with their environmental policies.

11.54 We observed that some federal government departments have developed risk assessment criteria to assign an order of priority to their environmental activities. One department has adopted a

Exhibit 11.3

The Sustainable Development Policy of a Major International Corporation

This organization is committed to sustainable development through the integration of economic and environmental decision making in its business activities. In addition to complying with legislation and exercising environmental due diligence, we will continuously improve the overall environmental performance of our operations and products while ensuring short- and long-term commercial success. We will set measurable targets and report our progress on a regular basis.

All employees and contractors are committed to and accountable for sustainable development performance within this organization.

President & CEO

SUSTAINABLE DEVELOPMENT: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

– United Nations World Commission on Environment and Development

risk management strategy and is gathering information to conduct a site-by-site analysis, to be followed by action commensurate with the results of the analysis. However, none of the federal government departments we interviewed has carried out a comprehensive risk analysis that looks at all of its activities and identifies and assesses the associated potential environmental impacts.

Legal and other requirements

11.55 As part of its initial review, an organization should identify the relevant environmental legislative and regulatory requirements. Once the environmental aspects and significant environmental impacts have been identified and ranked in order of priority, it may be necessary to return to the initial review to elaborate and establish a formal database to track sources and ongoing changes to the legislative and regulatory frameworks. Compliance with regulations is by far the largest motivating factor for Canadian organizations, in both private and public sectors, to take action on environmental issues.

11.56 As outlined in the recent “greening of government” initiative, the Canadian federal government is committed to meeting or exceeding federal environmental standards and regulations in its own operations. Under this initiative, compliance by federal departments with provincial regulations, although not a legal requirement, should be considered for the sake of federal-provincial harmony.

Internal performance criteria

11.57 Internal performance criteria are developed and adopted where there are no external standards that meet the needs of the organization. More than half of our private sector sample of good practitioners

had developed internal performance criteria in several areas, including waste management, product stewardship, compliance and due diligence.

11.58 Internal performance criteria in the federal government departments we interviewed consisted primarily of procurement standards. The apparent lack of additional internal performance criteria may be related to a lack of rigorous risk analysis. However, the federal government is making progress toward developing government-wide standards and promoting good practices for the management of waste, energy and water. One illustration is noted in Exhibit 11.4.

Environmental objectives and targets

11.59 According to ISO, environmental objectives and targets are established to carry out an organization’s environmental policy. Objectives are defined as the broad overall goals for environmental performance and should normally be identified in the environmental policy, whereas targets should be specific, measurable and achievable within a specified period of time.

11.60 We noted established objectives and targets in more than half of our private sector sample. Similarly, two of the six operating federal government departments interviewed have established

Compliance with regulations is by far the largest motivating factor for Canadian organizations to take action on environmental issues.

One government organization has carried out water and energy audits at several facilities. As a result of these audits, they have initiated remedial measures and conservation programs that have reduced overall resource consumption at these facilities. The organization is now using these improved resource consumption levels as internal standards against which they can quickly gauge the environmental performance of other facilities.

A Canadian federal government department

Exhibit 11.4

Internal Performance Criteria for Resource Consumption

Design the objectives to capture business opportunities as well as to address liabilities.

objectives. However, we observed targets in only one of those two. One other department that did not have objectives did have targets.

11.61 We acknowledge that it can be a challenge to obtain senior management agreement on which objectives are achievable in terms of resources, costs and the applicability of industry standards. One useful approach that can promote consensus building is to involve, in the establishment of objectives, the people who are responsible for achieving them. Other good practices we observed include communicating the objectives throughout the organization, identifying benefits as well as costs, designing the objectives to capture business opportunities as well as to address liabilities, establishing both short-term and long-term objectives, and establishing a process for review.

11.62 Once the objectives are established, targets can be set to achieve them within a specified time frame (see

Exhibit 11.5). The development of targets is often constrained by the limitations of the available baseline data. Wherever possible, the achievement of targets should be linked to a reward system at all levels in the organization.

Environmental management program

11.63 An organization should establish an environmental management program to address all of its environmental objectives and targets. According to ISO, the program forms the framework for implementing the EMS and for measuring and improving its environmental performance. It also provides the bridge to the next principle, implementation. The program can be free-standing, but it will likely be more effective if it is integrated into the organization's strategic plan. The environmental management program should be dynamic, and revised as appropriate to reflect any changes in organizational objectives and targets.

Exhibit 11.5

Example: Summary of Progress against 1993 Plans

1993 Commitment	Status
<ul style="list-style-type: none"> Update sustainable development plans for all complexes and departments 	<ul style="list-style-type: none"> Complete
<ul style="list-style-type: none"> Develop training for employees and management 	<ul style="list-style-type: none"> Employee training completed; management training developed and two pilots run
<ul style="list-style-type: none"> Reduce energy consumption by 10 percent over 1992 levels by 1997 	<ul style="list-style-type: none"> Reduced by 5 percent
<ul style="list-style-type: none"> Reduce solid waste by 50 percent over 1992 levels by 2000 	<ul style="list-style-type: none"> Reduced by 24 percent
<ul style="list-style-type: none"> Complete six audits in the upstream 	<ul style="list-style-type: none"> Three completed; three deferred
<ul style="list-style-type: none"> Complete eight audits in the downstream 	<ul style="list-style-type: none"> Completed nine
<p><i>Progress report on sustainable development. A major international corporation</i></p>	

11.64 In a recent survey by KPMG Environmental Services Inc. on Canadian environmental management, 63 percent of respondents indicated that they did not have an EMS in place because they dealt with issues “as required”. This approach may not cover issues adequately and it deals with events after the fact. A comprehensive environmental management program that identifies specific actions in their order of priority for the organization provides better assurance that all significant environmental aspects will be brought to the attention of the responsible senior managers and will be properly addressed.

11.65 Despite its importance, only half of the private sector organizations we interviewed and only one federal government department had developed a comprehensive environmental management program. Most cited inadequate resources and lack of support from staff and managers as major constraints. Support for an environmental management program may require a change in corporate culture. We note, however, that the majority of federal government departments interviewed have developed short-term environmental action plans to address specific issues.

11.66 Organizations with long-term environmental management programs in place explained to us that a well-thought-out program helps to foster commitment throughout the organization, particularly when it is integrated into the overall business plan and has been approved by senior management.

Implementation

11.67 According to ISO, for effective implementation an organization should develop the capabilities and support mechanisms necessary to achieve its

environmental policy, objectives and targets.

11.68 Translating comprehensive environmental or sustainable development policies and objectives into operational terms is a major undertaking that affects the entire organization. According to the Institute for Sustainable Development,

It [implementing environmental/sustainable development policies] involves changing the corporate culture, management and employee attitudes, defining responsibilities and accountability and establishing organizational structures, information systems and various operational practices.

11.69 It is not realistic to assume that an organization can be transformed overnight. The majority of organizations claim that these changes are fairly substantial and require a three-year to five-year implementation plan.

11.70 This is not to say that a new bureaucracy, with its associated costs, should be created. By adhering to a strategic and pragmatic environmental management program, an organization should be able to develop priorities and begin the implementation process in a logical and rational way. The EMS should fit into the existing management structure. ISO suggests that, in order to achieve its environmental objectives, an organization should focus and align its people, systems, strategy, resources and structure.

11.71 ISO 14004 breaks down the principle of *implementation* into two components: *ensure capability* and *support action*. ISO identifies the following elements that are required to *ensure capability*:

A well-thought-out long-term environmental management program helps to foster commitment throughout the organization.

- Resources — human, physical and financial
- EMS alignment and integration
- Accountability and responsibility
- Environmental awareness and motivation
- Knowledge, skills and training

Obtaining resources is a major challenge for federal government organizations.

Resources — human, physical and financial

11.72 The importance of appropriate resources cannot be underestimated. In its EMS model, ISO identifies appropriate resources as an essential element for implementing the environmental policy. We observed, in both the private and the public sectors, that the allocation of adequate resources is important throughout the entire life cycle of the EMS. As we have noted, many of the private sector organizations track environmental benefits as well as costs. Demonstrating the value of the investment encourages the attraction of required resources (see Exhibit 11.6).

11.73 Obtaining resources is a major challenge for federal government organizations. Overall, resources have been reduced significantly and

organizations may feel hard pressed to allocate resources to meet their own mandates. Furthermore, the benefits of improved environmental performance may not flow back to the department or agency that expended the resources. In such a case, only the most environmentally sensitive manager could be expected to voluntarily allocate significant resources to the environment.

11.74 However, an organization must be prepared to allocate the resources needed to meet its environmental obligations and to prevent it from incurring environmental liabilities. There are also many low-cost environmental initiatives, such as reducing paper consumption and waste generation, that can yield significant financial and environmental benefits.

EMS alignment and integration

11.75 The elements of the environmental management system should be aligned and integrated with existing management systems. The EMS elements that normally need to be integrated include the environmental policy, management program, information management, training, accountability and responsibility, measuring and monitoring systems, and communication and reporting. In the private sector, most organizations we interviewed have established and aligned environmental groups in their organizations and have begun to integrate their environmental initiatives with their identified business directions. The more advanced corporations report their environmental performance information in a similar fashion to their financial and operating results.

11.76 All of the federal government departments we interviewed have begun to integrate “green” activities into their operations. They recognize that more

Exhibit 11.6

Environmental Solutions Can Result in Direct Cash Savings for the Organization

The decision to go for total elimination of CFC-113 solvent use within three years was nine years ahead of the deadline set by the Protocol (Montreal). We realized that in fact there was a solid business case for eliminating CFCs from our operations. Over the project's three years, we spent \$1 million on research and development. During the same period, we saved about \$4 million. The savings came from decreased solvent purchases, the elimination of cleaners and their associated operating and maintenance costs, and reductions in solvent waste for disposal.

Senior Vice-President, a major international corporation

work needs to be done to integrate environmental management systems fully into their management process.

Accountability and responsibility

11.77 It is a good practice to assign to a senior person in an organization the overall responsibility for the EMS. In the private sector, approximately half of the corporations we interviewed have a vice-president who is accountable for reporting progress on environmental matters. Defined environmental responsibilities should cascade down from the senior management level to managers and line personnel. All employees should be accountable within the scope of their assigned environmental responsibilities. The identification of responsibilities is a first step toward assigning accountability (see Exhibit 11.7).

11.78 In some organizations in both the private and the public sectors, the assignment of environmental responsibilities is unclear: in some cases there is duplication and in other cases there are gaps. Some federal government officials expressed concern over the lack of existing controls and mechanisms to ensure that management and employees are held accountable for environmental performance.

Environmental awareness and motivation

11.79 It is important that environmental values be developed for the organization. Senior management has an important role in making staff aware of environmental values and in motivating them. The private sector companies we interviewed use a variety of means to increase staff awareness of environmental values and to motivate them, including business reports, the environmental policy, newsletters, training programs, award programs,

procurement standards, “environmental days”, etc. Overall, motivation of staff appears to be reinforced by measurement and reward. One federal government department we interviewed uses a wide range of tools to communicate values and to motivate staff.

11.80 We were told by several of our interviewees that motivating employees was a particular challenge in organizations that had recently been through a downsizing exercise or had a recent history of labour-management disputes. Federal government employees may have difficulty accepting the idea that resources should be assigned to environmental initiatives while other programs, services and jobs are being eliminated.

Knowledge, skills and training

11.81 The final element that contributes to building the implementation capability is environmental knowledge, skills and training. Once again, senior management involvement is very important. Environmental training programs cover a wide variety of subjects and are targeted at several different audiences. The nature

It is a good practice to assign to a senior person in an organization the overall responsibility for the Environmental Management System.

Senior management has an important role in making staff aware of environmental values and in motivating them.

The Department of National Defence has issued a short but comprehensive *Commander's Guide on Environmental Protection*. The guide sets out the Department's environmental policy and the roles and responsibilities of various individuals and environmental committees in the Department. The guide uses questions to guide commanders in the management of their environmental responsibilities in several areas, including environmental assessment, energy and water conservation, handling of hazardous materials, and employee awareness and recognition. The guide emphasizes the commander's personal responsibility for complying with environmental legislation, for environmental due diligence and for meeting other environmental goals.

Exhibit 11.7

Environmental Protection Guide

Most organizations have come to appreciate the importance of reporting environmental performance information.

of each organization's training program depends on the nature of its business and its specific requirements. Private sector firms with well-developed environmental training programs have vested senior management with the responsibility for environmental training. In addition, senior managers have received the training themselves.

11.82 None of the federal government departments we interviewed had developed a comprehensive environmental training program that addressed the risks associated with its products, services or activities. However, four departments have provided environmental training related to specific environmental issues. One department is in the process of developing an analysis of training needs. Another department has completed such an analysis and is now developing a comprehensive environmental training program.

11.83 ISO identifies the following elements to *support action*:

- Communication and reporting
- EMS documentation
- Operational control
- Emergency preparedness and response

Communication and reporting

11.84 Environmental communication includes both the internal and external reporting of environmental information, issues and performance. The majority of organizations we interviewed in both the private and the public sectors have established environmental communication and reporting systems. Our observations indicate that internal environmental reporting in the private sector organizations we interviewed is somewhat more advanced than in the federal

government. These private sector organizations give environmental issues a high profile by making extensive use of environmental committee reports, internal communications and company newsletters. Such communications are also very important in strengthening environmental awareness, values and motivation.

11.85 In the private sector, most organizations have come to appreciate the importance of reporting environmental performance information and it is quickly becoming common practice. *Reporting on Environmental Performance*, which was published by the CICA in October 1994, reviewed the main topics that could be covered when reporting on environmental performance. The nature of the organization's business and the target audience determines what information is relevant. The CICA study states, "An organization needs to report some general information about how environmental issues affect the organization, and what impact its activities and products have on the environment."

11.86 The data and information from the EMS are used to prepare the analysis of environmental performance information and to support the discussion and analysis of actual performance and corrective actions taken. Environmental reports should also include a discussion of any plans to improve environmental performance in the future.

11.87 Good external reporting practices that we observed in federal government departments include the dissemination of environmental information through such sources as the information highway and the Estimates. However, the reporting of environmental performance information has yet to be developed fully.

EMS documentation

11.88 The concept of an environmental management system is relatively new. There is not yet an abundance of EMS documentation that supports the elements of an organization's EMS, including the evaluation of risks, the setting of objectives and targets, the assignment of responsibilities, and the definition of operational procedures and controls. In the private sector organizations we interviewed, the process to develop EMS documentation is still evolving. Federal government departments have not yet begun to develop it.

11.89 A few organizations raised concerns about the potential for overemphasizing documentation. EMS documentation can be time-consuming and costly to generate and should be generated, therefore, only to add value to the environmental management system.

11.90 Benefits cited by the private sector companies we interviewed included the usefulness of EMS documentation for preparing environmental audits and compliance reviews and for demonstrating due diligence.

11.91 Organizations seeking certification under ISO14001 will have to meet specific documentation requirements. Similarly, federal departments and agencies wanting to substantiate their environmental performance may also wish to document their EMS.

Operational control

11.92 The International Organization for Standardization states that "implementation is accomplished through the establishment and maintenance of operational procedures and controls to ensure that the organization's

environmental policy objectives and targets can be met." Environmental operational controls can be present in three general areas: activities to prevent pollution, daily management activities and strategic management activities. Environmental operational controls should be integrated with the overall management control framework.

11.93 In both the private and the public sectors, about one third of the organizations we interviewed identified specific environmental operational controls. Private sector organizations that have such controls in place claim that, when combined with heightened employee awareness, they can significantly reduce environmental risks and liabilities.

Emergency preparedness and response

11.94 Emergency response planning is conducted in organizations whether there is an environmental management system in place or not. The greater the environmental risks to business, including threats to health and safety, the greater the need for developing emergency response plans. In both the public and the private sectors, we observed a great variety in the detail and scope of such plans.

11.95 We recognize that emergency planning is not static and that updates can be costly. There may also be a significant amount of training and retraining required. Nonetheless, at a minimum, all major environmental risks should be identified and documented, and organizations should have appropriate emergency response plans that are reviewed, tested and revised as appropriate.

Measurement and Evaluation

11.96 According to ISO, an organization should measure, monitor and

Organizations should have appropriate emergency response plans that are reviewed, tested and revised as appropriate.

It is a good idea to begin measuring as early as possible, and not to wait for the perfect system.

evaluate its environmental performance using the following elements:

- Measuring and monitoring
- Corrective and preventive action
- EMS records and information management
- Audit of the EMS

Measuring and monitoring

11.97 Organizations should measure and monitor the achievement of their environmental objectives and targets and the overall effectiveness of operations. Monitoring is a well-established management practice and in many areas is linked to reporting, since internal and external reports are often the focus of monitoring activities. The Institute for Sustainable Development states that “the key to any system’s effectiveness is usually whether management actively monitors the system’s operations and outputs on an ongoing basis.”

11.98 In the private sector, approximately half of our sample population had comprehensive environmental measuring and monitoring systems in place, some of which clearly identify the key performance indicators to be tracked. The incentives for developing

these indicators have largely been external reporting requirements and public expectations. The scope and content of such systems are usually identified and outlined in an organization’s long-term environmental program.

11.99 The federal government departments we interviewed have not yet established such systems for each of their lines of business, covering their products, services and activities. One of the departments measures and monitors its waste management activities. A second department measures and monitors its hazardous waste clean-ups.

11.100 Capturing reliable environmental data may require specialized skills, instruments and techniques (see Exhibit 11.8). The data must then be analyzed to determine if improvements and corrective actions are necessary. Despite the complexity and the challenges that a comprehensive measuring and monitoring system present, several private sector organizations suggested that it is a good idea to begin measuring as early as possible, and not to wait for the perfect system. Through continuous improvements to the measuring and monitoring systems, an organization can encourage the appropriate kinds of changes leading to improved environmental performance and accountability.

Corrective and preventive action

11.101 The findings, conclusions and recommendations from monitoring, audits and reviews of the EMS should be documented and the necessary corrective and preventive actions identified. Private sector organizations that have completed reviews and identified corrective and preventive actions have developed several tools and procedures to improve their EMS. These include the development of a corrective action plan to address

Exhibit 11.8

Monitoring Air Emissions

Since 1989, air emissions from the copper smelter have been treated in the acid plant to remove SO₂. However, some SO₂ continues to be released to the atmosphere. To avoid any build-up of SO₂ gases during unusual weather conditions, the smelter has implemented a unique environmental control system. The system uses sophisticated instruments and a highly specialized weather team to predict local weather conditions up to five days in advance. Smelter production can then be changed, within minutes, to maintain the quality of the ambient air.

A major international corporation

management concerns, procedures for recording non-conformance and corrective actions, and assignment of responsibility for such actions.

EMS records and information management

11.102 The development of EMS records and information management is in its early stages. A few organizations in both the federal government and the private sector have established on-line environmental management information systems to capture data and track performance. These information systems capture specific environmental data such as air emissions, water quality, etc. The most advanced organizations in the private sector have integrated this environmental information into their information systems for the management of capital assets. They have compiled records to demonstrate the extent of compliance with policies and the extent to which planned objectives and performance criteria have been met. The greatest challenge is to keep the information current.

11.103 The government has directed departments to report in their Estimates their progress toward attaining environmental sustainability. Clearly, therefore, they will have to develop good EMS records and information management systems.

Audit of the EMS

11.104 Auditing the EMS is one practical way to monitor the implementation of management policies. Periodic audits of the EMS should be conducted to determine whether the system conforms to approved arrangements and has been properly implemented and maintained.

11.105 Approximately half of the private sector organizations we interviewed have

audited their EMS. Most of these organizations audit their EMS regularly and, wherever feasible, document its benefits, including cost reductions and the avoidance of legal fines.

11.106 The environmental management systems in the federal government have not yet evolved to the point where a department is actually auditing its EMS as a separate system. Two departments have had consultants review their environmental management process and make recommendations for developing an EMS. Another has audited various aspects of its environmental management process and is integrating environmental issues in many of its program audits.

11.107 EMS audits are not to be confused with the term “environmental audit”, which is generally applied to compliance reviews and environmental site assessments. These “environmental audits” can nevertheless be quite useful, particularly when an organization is in the early stages of developing and implementing an EMS. The International Organization for Standardization is developing internationally accepted definitions of environmental auditing, which include a standard that should define the parameters of an EMS audit. These are expected to be issued as draft international standards later in 1995.

Review and Improvement

11.108 According to ISO, an organization should review and continually improve its environmental management system, with the objective of improving its overall environmental performance. “Review and improvement” is the principle in the EMS model that is least developed in the organizations we interviewed. At the same time, however, a few organizations pointed out that review and improvement is the area with the

A few organizations in both the federal government and the private sector have established on-line environmental management information systems.

Review and improvement of the Environmental Management System is the area with the largest potential for payback and benefits.

largest potential for payback and benefits. ISO identifies the following elements of review and improvement:

- Review of the EMS
- Continual improvement

Review of the EMS

11.109 Whereas an audit of an environmental management system attempts to determine whether the EMS conforms to approved arrangements, a review of an EMS is a high-level overall assessment to ensure the continuing suitability and effectiveness of the EMS. The review of the EMS should be performed at defined intervals, depending on the size and the nature of the organization's business. Not all of the components of the EMS need to be reviewed at the same time.

11.110 Some organizations have found it a good practice to use people in the organization rather than outside consultants, particularly when reviewing the policy, objectives or procedures.

11.111 As we have noted, most environmental management systems in the federal government are in their early stages of development. Although none of the departments we interviewed has reviewed its EMS as such, some departments are undertaking reviews of

their environmental activities, defining action plans and identifying responsible individuals.

Continual improvement

11.112 Continual improvement begins with the elements of the previous principle — measurement and evaluation — and extends to reviews of the entire EMS. The performance of the EMS should be evaluated continually to identify opportunities for overall improvement. Continual improvement of the EMS should lead to improved environmental performance and accountability (see Exhibit 11.9).

Summary and Conclusions

Everyone Has Some Progress to Make

11.113 We have observed the progress made in the private sector and in the federal government in applying each of the ISO principles and their elements. Because we were not auditing the organizations, our observations are somewhat subjective and based to a large extent on information provided to us by the organizations we interviewed.

11.114 Our overall impression is that the private sector organizations we interviewed were generally further advanced than the federal departments and agencies in implementing comprehensive environmental management systems. Nevertheless, very few of the elements are fully developed in either the private or the public sector.

11.115 The federal government has taken steps, through initiatives such as the Environmental Accountability Partnership, to improve its environmental management practices.

Exhibit 11.9

Continual Improvement

Since 1990, we have reduced discharges of non-toxic by-product materials by 11 percent, while production has increased by the same percentage. We expect to reduce the remaining discharges by a further 60 percent by 1996. That means we can expect to exceed our goal and reduce non-toxic emissions by 80 percent by the end of the decade.

Environmental report card, published by a major international corporation

The ISO Model Is a Useful Guide

11.116 Heading into the twenty-first century, all organizations must recognize the link between a healthy environment and sustained economic growth. The focus should not be on whether an organization has established an EMS that fulfils the requirements of any particular model, but on whether it is managing its environmental risks and objectives within the framework of its overall management system. ISO 14004 is only one of several models that sets out a framework to bring discrete environmental activities into an integrated system.

11.117 In combination with our review of the literature, feedback from our study participants consistently supports the importance and usefulness of all of the elements of the ISO 14004 model. The model is universal; it simplifies compliance, increases competitiveness, and minimizes administrative costs and oversight. Depending on the nature of the organization's business, some elements of

the model may be more important to it than others.

Certain Themes Are Worth Emphasizing

11.118 Many "themes" emerged as a result of our analysis. We defined a "theme" as an observation repeated in several different elements of the ISO 14004 model and in different organizations. As shown in Exhibit 11.10, some of these themes are elements themselves — for example, effective communication to all stakeholders — and can be considered important ingredients for success. Other themes reflect good practices that are recognized and practised by several of the study participants.

11.119 Generally, the successful implementation of an EMS will depend on the sequential development of the principles. For example, the EMS must have the support and commitment of senior management before it is planned; the support capability must be developed before the system can be successfully implemented; and the EMS must be

Themes identified by survey participants that are identical to elements of the ISO model

Senior Management Commitment and Support
Adequacy of Resources
Effective Communication to All Stakeholders
Identifying Responsibility as a Basis for Assigning Accountability and for Recognition and Reward
Integration with Existing Management Structure
Evaluation and Review

Other themes identified by survey participants as good practices that are consistent with the ISO model

Senior Management and Employee Involvement
Consistency of Other EMS Elements with the Environmental Policy
Identification and Recognition of Benefits: Real and Potential
Sequencing and Timing for Implementation and Development of EMS
Currency of Information

Exhibit 11.10

Environmental Management Themes

Continual improvement of the organization's environmental performance is ultimately what is most important.

measured and evaluated before it is reviewed and improved. Similarly, within each principle, development of one element may be a prerequisite for the development of another.

Improved Environmental Performance Is the Objective

11.120 It is important to recognize that each organization's environmental management needs will be specific to that organization. The sum of all the

individual elements does not necessarily make a good EMS. An EMS model provides only the framework or starting point from which to build an effective environmental management system, fully integrated with an organization's overall management system. Adherence to a rigid structure can stifle the opportunity for innovation and hinder the development of appropriate solutions to environmental challenges. Continual improvement of the organization's environmental performance is ultimately what is most important.

Audit Team

John Affleck
Gary Barber
Pablo Fonte
Jacques Leduc
Lucie Talbot

For further information, please contact Wayne Cluskey, the responsible auditor.

APPENDIX I

**Examples of Organizations Developing
Environmental Management Approaches**

British Standards Institute: BS7750: Implementing the Environment Management Standard and the EC Eco-Management Scheme.

Canadian Chemical Producers' Association: Responsible Care: A program with environmental codes of practice for members that are conditions of membership.

Canadian Standards Association (CSA), CSAZ750: Guideline For a Voluntary Environmental Management System, Canadian Standards Association, Draft revision 8.0, November 1993.

European Community: Eco-Management and Auditing Scheme (EMAS)

Global Environmental Management Initiative (GEMI): Environmental Self-Assessment Program, First Edition 1992. (based on the ICC's Business Charter for Sustainable Development)

International Chamber of Commerce (ICC): A Guideline for Corporate Environmental Reporting (Toronto:1992).

International Institute for Sustainable Development (IISD): Business Strategy for Sustainable Development – Leadership and Accountability for the 90s.

International Organization for Standardization (ISO), ISO 14004: Environmental management systems – General Guidelines on Principles, Systems and Supporting Techniques ISO/DIS 1400X ISO/TC 207 SC1 N83. June, 1995

U.S. Environmental Protection Agency; Office of Federal Facilities Enforcement: Draft Code of Environmental Management Principles (CEMP) for Federal Agencies.

APPENDIX II

Contributing Organizations

We acknowledge the contribution of the following organizations that provided their valuable information and time to the study.

Private sector companies and Crown corporations included in our review of good practices:

3M Canada Inc.
Alcan Smelters and Chemicals Ltd.
Bell Canada
BC Hydro
Chevron Canada Resources
CP Rail System
Domtar Inc.
Dow Chemical Canada Inc.
DuPont Canada Inc.
Hercules Canada Ltd.
Hydro Quebec
Kodak Canada Inc.
Noranda Inc.
Northern Telecom Canada Ltd.
Ontario Hydro
Petro-Canada
Shell Canada Ltd.
TransAlta Utilities Corporation
WestCoast Energy Inc.

Canadian federal departments and agencies included in our review of federal government practices:

Agriculture and Agri-food Canada
Correctional Service Canada
Environment Canada
National Defence
Public Works and Government Services Canada
Transport Canada
Treasury Board Secretariat

Other organizations interviewed for background information:

BC Ministry of Transportation and Highways
Canadian Standards Association
Homer Frank W. Ltd.
Ontario Ministry of Transportation
U.S. Department of Energy
U.S. Department of Defense
U.S. Environmental Protection Agency – Office of Federal Facilities Enforcement
U.S. Federal Aviation Agency
U.S. General Accounting Office
Wyeth Ayerst Canada

APPENDIX III

**The Code of Environmental Stewardship for the
Government of Canada**

The federal government has adopted a Code of Environmental Stewardship, which covers all areas of federal activity. It is a statement of principles to guide all federal government decision making. The Code commits the government to the principle of sustainable development in all aspects of its operations, from facilities and real property management to procurement and waste management.

The Government of Canada fully supports the principle of sustainable development. To reflect this commitment in all aspects of its operations and activities, from facilities and real property management to procurement and waste management, the Government commits:

- To integrate environmental concerns with operational, financial, safety, health, economic development and other relevant concerns in decision making.
- To meet or exceed the letter and spirit of federal environmental laws and, where appropriate, to be compatible with provincial and international standards.
- To improve the level of awareness throughout the public service of the environmental and health benefits and risks of operational decisions and to encourage and recognize employee actions.
- To apply environmentally responsible management practices to hazardous substances used in operations, including biological products, specifically with regard to the acquisition, handling, storage, safety in use, transportation and disposal of such substances.
- To ensure that environmental considerations are integrated into government purchasing policies and practices.
- To seek cost-effective ways of reducing the input of raw materials, toxic substances, energy, water and other resources, and of reducing the generation of waste and noise associated with day-to-day operations.
- To acquire, manage and dispose of lands in a manner that is environmentally sound including the protection of ecologically significant areas.

Report of the Auditor General of Canada to the House of Commons – 1995

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Chapter 12
Systems under Development:
Managing the Risks

October 1995

**Report of the
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to the House of Commons**

Chapter 12
Systems under Development:
Managing the Risks



October 1995

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Chapter 12

Systems under Development

Managing the Risks

The audit work reported in this chapter was conducted in accordance with the legislative mandate, policies and practices of the Office of the Auditor General. These policies and practices embrace the standards recommended by the Public Sector Accounting and Auditing Board (PSAAB) of the Canadian Institute of Chartered Accountants.

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Assistant Auditor General: David H. Roth
Responsible Auditor: Eric Anttila

Systems under Development

Managing the Risks

Main Points

12.1 Organizations today view the successful introduction of technology as being critical to their success. They are looking to the significant potential offered by information technology to reduce costs and improve service. The Canadian federal government is no exception.

12.2 The implementation of systems development projects, in both the private and public sector, is characterized by risk and uncertainty. Accordingly, it is imperative that the risks be identified, evaluated and effectively managed.

12.3 We found that only one of the four systems under development that we reviewed — Transport Canada's Integrated Departmental Financial and Materiel Management System (IDFS) — is currently being managed in a way that deals effectively with the risks associated with the project. Of the remaining three, the Public Service Compensation System (PSCS) has been terminated by Public Works and Government Services Canada; the Common Departmental Financial System (CDFS), being developed by Public Works and Government Services Canada, has only a small number of committed users, and the Income Security Program Redesign (ISPR) requires continued corrective action by management of Human Resources Development Canada to reduce project risks.

12.4 In its attempt to develop PSCS, Public Works and Government Services Canada has spent approximately \$61 million, of the estimated total project cost of \$119.5 million, for which the planned benefits will not be realized.

12.5 Private sector research indicates, and our own risk assessment supports the view, that the likelihood of large multi-year systems development initiatives being completed on time, within budget and with the desired functionality (what the system should do for its users) in the public and private sectors is extremely low.

12.6 To improve the likelihood of successfully introducing information technology, the government will need to focus on implementing its long-term information technology strategies through smaller, more manageable components, each of which provides an improved capability (efficiency and/or effectiveness) to the organization.

12.7 Among the factors critical to managing the risks that affect the successful introduction of information technology are:

- effective project sponsorship by an individual who can ensure that the organization understands and achieves the planned benefits from the systems development project;
- clearly defined functional and system requirements;
- effective user involvement and commitment to the success of the project; and
- the expertise and experience of resources dedicated to the project.

12.8 Departments and the Treasury Board Secretariat (TBS) have acknowledged the difficulties and risks in delivering large information technology projects, and the Secretariat has undertaken a major review of the factors contributing to the difficulties. TBS is currently working with departments on a variety of changes to project initiation, management and monitoring processes.

Background

12.9 The Canadian federal government, like many organizations, is making significant investments in the development of information technology, with the objective of reducing the cost of government and delivering programs more efficiently and effectively. Through its *Blueprint for Renewing Government Services Using Information Technology*, the government has made the successful introduction of information technology a key priority. Currently 25 large systems development projects, having a combined budget of more than \$2.1 billion, have been identified to Treasury Board as having been initiated to realize the benefits available from the successful introduction of technology.

12.10 In recent years, the amount spent on developing large-scale computer systems, in both the private and public sectors, has risen dramatically. Historically, many of these systems have failed to meet the needs of prospective end-users and/or have not incorporated sufficient financial and managerial controls.

12.11 Within the federal government, the Public Accounts Committee, this Office and a number of deputy ministers, through the Treasury Board Secretariat Committee on Information Management Systems, have expressed concern over the difficulties experienced by the government in implementing systems development projects.

12.12 A recent United States research study completed by The Standish Group, which included both private and public sector organizations, reported that “a staggering 31.1 percent of projects will be cancelled before they ever get completed” and that “52.7 percent of projects will cost 189 percent of their original estimates.”

This study noted that “on the success side, the average is only 16.2 percent for software projects that are completed on-time and on-budget.” In larger companies, “only 9 percent of their projects come in on-time and on-budget.”

12.13 Nevertheless, most organizations have become either largely or totally dependent on their computer systems. With current technologies, systems are becoming significantly more integrated and complex. For the remainder of this decade, emerging technologies will place even greater demands on all organizations — including the federal government — to introduce technology in a careful, well-managed way.

12.14 Within the federal government, a number of organizations have specific responsibility for portions of the systems development life cycle. Exhibit 12.1 lists these organizations and their respective responsibilities. Exhibit 12.2 provides an overview of key steps in the systems development process.

Audit Scope

12.15 The audit examined four major systems under development:

- Public Service Compensation System, being developed by Public Works and Government Services Canada;
- Income Security Program Redesign, being developed by Human Resources Development Canada;
- Common Departmental Financial System, being developed by Public Works and Government Services Canada; and
- Integrated Departmental Financial and Materiel Management System, being developed by Transport Canada.

12.16 Brief descriptions of the four systems are provided in Exhibit 12.3.

Currently 25 large systems development projects, having a combined budget of more than \$2.1 billion, have been identified.

Emerging technologies will place even greater demands on all organizations — including the federal government — to introduce technology in a careful, well-managed way.

12.17 We chose these specific systems because they:

- are complex, long-term initiatives that will take several years to implement and will affect a significant number of Canadians;
- either affect the infrastructure of government, or have an important impact on the operational capabilities of a department; and
- represent a significant investment on the part of the government, particularly during a period of restraint.

12.18 We recognize that these four systems may not be representative of all systems development initiatives in government. Their total value of approximately \$500 million, representing nearly 24 percent of the government's current spending on the largest information technology projects, makes them significant in their own right. However, the conclusions of this audit

should be of interest to all departments involved in systems development projects.

12.19 The audit also considered the impact of environmental factors, such as changing priorities and objectives of the government, new technologies, and changes in organizational structure that affect the implementation of such systems.

12.20 In addition, we examined the role of central agencies in the approval and funding of these projects, because the independent review and analysis of data provided by departments, in support of a request for approval and funding of a project, is a key control within the government's expenditure management system.

12.21 The scope of this audit did not include a review of the procurement of information technology, as this is the subject of a separate audit to be reported in 1996. In addition, we did not audit the role of the contractors in these projects, since it is the responsibility of

Exhibit 12.1

Organizational Responsibilities for Systems under Development

Organization	Responsibilities
Treasury Board	<ul style="list-style-type: none"> • Approves system development initiatives and funding
Treasury Board Secretariat	<ul style="list-style-type: none"> • Provides recommendations and advice to the Treasury Board – based on the analysis of business case, project risks and the potential for success – whether a project should be approved • Develops policies, directions and goals for the implementation of information technology within the federal government • Monitors progress against established directions and goals • Establishes a framework for and actively supports the re-engineering of government administrative processes
Departments	<ul style="list-style-type: none"> • Develop a sound viable business case in support of the system development initiative • Manage the development and implementation of the system • Perform ongoing maintenance and operation of the system after implementation

departmental management to monitor and manage the contractor's performance.

Audit Approach

12.22 As we reported previously, our Office is interested in the wise investment in technology to reap the benefits that it offers. The current audit is part of a series of chapters that will examine the implementation of large-scale systems development projects. The Office's approach was to be proactive and constructive, which involves reviewing systems while they are being developed, rather than waiting until they have been implemented. This approach allows us to alert both management and Parliament to the need to take corrective action early in the systems development process.

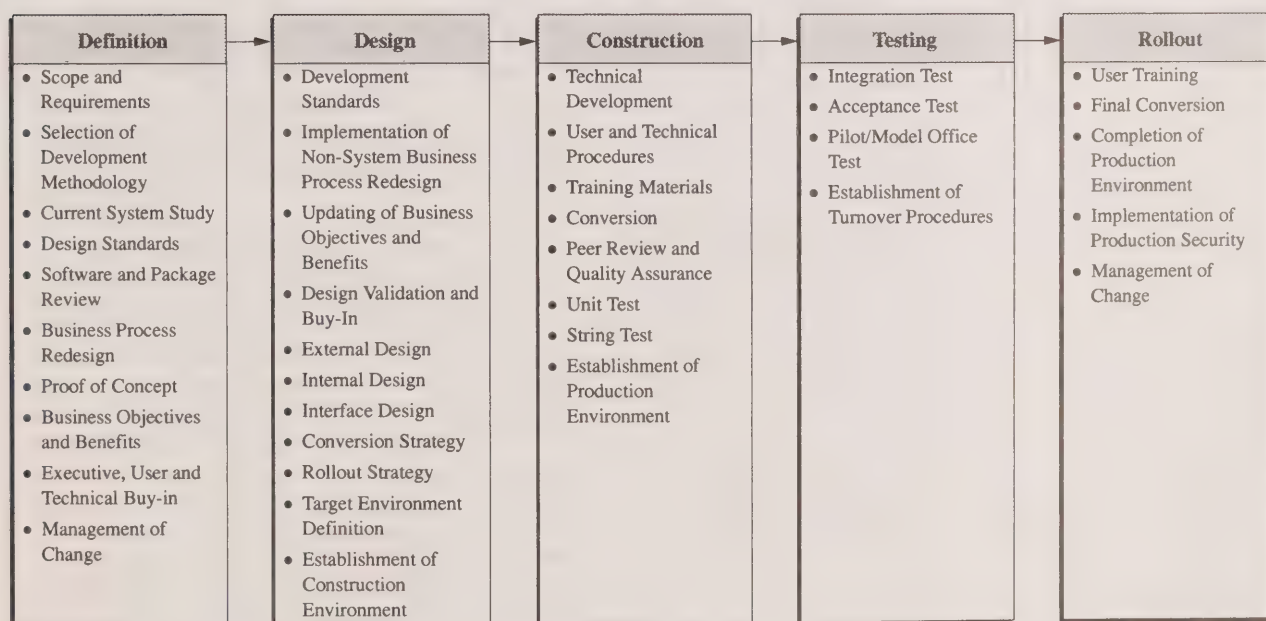
12.23 As the basis for our audit, we conducted a risk assessment, a process through which professional judgment is applied in considering certain basic questions about virtually any project, including systems under development. These questions include:

- What can go wrong?
- What is the probability of it going wrong?
- What are the likely consequences if it does go wrong?
- Who will be affected if it goes wrong? and
- What procedures has management implemented to control risks and to mitigate potential consequences?

12.24 Our audit focussed on these questions by assessing the risks associated with implementing systems development

Exhibit 12.2

Typical Key Development Steps



Notes: 1. All systems development approaches encompass the above key steps.
2. The order of the key steps varies among systems development methodologies.

The implementation of systems under development projects, in both the private and public sectors, is characterized by risk and uncertainty.

projects through a framework that considered the processes and practices that management had put in place to identify:

- the potential risks that could hinder or prevent the successful implementation of a system, and manage those risks;
- the complexity of the technical and business solutions being implemented; and
- the linkage between the projects' objectives and departmental business lines and priorities.

12.25 To provide a basis for comparing the results of this audit with the experience of the private sector, we also reviewed a number of recent research

studies that examined the reasons why systems development projects fail.

Observations

Systems Status and Risk Management

12.26 The implementation of systems under development projects, in both the private and public sectors, is characterized by risk and uncertainty. Accordingly, it is imperative that the risks be identified, evaluated and effectively managed.

12.27 In our current audit, we found that only one of the four systems reviewed, the Integrated Departmental Financial and Materiel Management

Exhibit 12.3

The Four Large Multi-Year Information Technology Projects in Brief

Public Service Compensation System:

The PSCS project was initiated in 1988 to improve the pay and pension processes through better use of technology and to lower the cost of compensation administration within the federal government. Approved Treasury Board funding for the project rose from \$55.1 million in 1988, to \$119.5 million prior to the cancellation of the project in 1995.

Income Security Program Redesign:

The ISPR project was initiated to create and integrate the delivery of the then Family Allowance, Old Age Security and Canada Pension Plan, with a view to improving service to Canadians while reducing the costs of administering these programs. The \$283 million project, which began in 1987, is to be completed by the year 2000. Anticipated benefits include reductions in processing times, reduced annual operating costs of \$30 million, starting in 1997, and a one-time reduction of \$200 million in overpayments. Total savings over the life of the project are estimated to be \$471 million.

Common Departmental Financial System:

The CDFS project was initiated under the auspices of the Treasury Board Secretariat's Financial Information Strategy (FIS), an initiative intended to allow the government to renew its financial system infrastructure and develop a new set of guiding principles for financial systems and management. The CDFS was intended to meet the needs of departmental users for financial management and reporting and to satisfy the requirements of the central agencies. The project, which was initiated in 1988, has cost, to date, an estimated \$25 million.

Integrated Departmental Financial and Materiel Management System:

The IDFS project was initiated in Transport Canada to develop an integrated, financial and materiel management information system. The \$63 million systems development initiative was undertaken to streamline and re-engineer financial and materiel functions and business processes and seek greater integration; provide departmental management with timely information; replace aged systems; and ensure compliance with the FIS strategy.

System, is presently being managed in a way that deals effectively with the risks associated with the project. Of the remaining three:

- the Public Service Compensation System (PSCS) has since been terminated by Public Works and Government Services Canada(PWGSC);
- the Common Departmental Financial System(CDFS), after six years of development, has obtained the support of only a small number of users. At the time of the audit, only one department, PWGSC, and three small agencies had committed to switch from the financial accounting system, which CDFS was designed and built to replace; and
- the Income Security Program Redesign (ISPR) project needs continued corrective action by departmental management to reduce project risks.

12.28 In particular, we noted the following factors with respect to ISPR, which require immediate attention to reduce project risks from the present high level:

- As of June 1995, the project was at month 15 of a 35-month contract. Despite the fact that 20 months remained until completion of the contract, the project had used up the entire contingency provided for schedule slippage.
- To help recover past schedule slippage, a decision has been made to perform a number of tasks in parallel, which were originally planned to be completed in a sequential manner. In addition to helping mitigate current information technology risks, this also has the effect of shifting the dates for completion of some project tasks until much later in the life of the contract, thus increasing project risks in the latter stages of the project.
- At present, the project office receives data from the contractor with respect to

percentage of a task completed. However, it does not receive information on actual versus planned levels of effort expended by the contractor to complete these tasks, or estimates of the levels of effort that will be required to complete them. In our view, such information is important for effective project management as it allows more accurate prediction of levels of effort to complete the project.

12.29 A major commitment and sustained effort on the part of project management will be required to reduce these risks to a manageable level.

12.30 Our risk assessments for all projects represent a snapshot in time of a project's status and the risks that project management faced at the time of the assessment.

12.31 The findings that have emerged from this audit are not new. Although we have made similar observations in past audits, the issues that have led to these observations persist and continue to impair the ability of the government to successfully introduce information technology. Although management has generally identified those risk factors that continue to cause difficulties in implementing systems, it has not been effective in reducing the risks associated with large multi-year projects.

12.32 In comparing the results of this audit and previous audits with the results of private sector research studies, the factors that influence the risks associated with systems development initiatives in the Canadian federal government are similar to those reported in the private sector.

12.33 Current approaches to developing and managing systems development projects must be changed. If current practices are continued, and private sector results are applied, a significant number of the 25 large-scale systems, with total

If current practices are continued, and private sector results are applied, a significant number of the 25 large-scale systems, with total planned expenditures of \$2.1 billion, will experience serious difficulties, resulting in some cancellations and / or significant cost overruns.

planned expenditures of \$2.1 billion, will experience serious difficulties, resulting in some cancellations and/or significant cost overruns.

12.34 We recognize that, while there are similarities in the factors that affect the risk of systems under development, there are also differences in the ways in which the private sector and the federal government deal with projects experiencing difficulties. Traditionally, there has been a tendency within the federal government to reorganize and restructure projects and apply additional resources rather than cancel projects.

12.35 Whether projects are cancelled or restructured, the impact of project cancellations and/or cost overruns is significant. In the case of the PSCS project, Public Works and Government Services Canada (PWGSC) had spent approximately \$61 million, of the estimated total project cost of \$119.5 million, by the time it terminated the project. These figures reflect only the Department's expenditures for purchased services and do not include the cost of departmental resources dedicated to the project, or such elements as the cost of money.

12.36 There is little doubt that PWGSC did gain improvements in its departmental infrastructure as a result of the system development work that was done; however, a significant amount has been spent for which the planned savings will not be realized. The Secretariat has noted that the government will still receive a return on its investment in the PSCS system, as the funding levels of PWGSC have already been permanently reduced by the savings that were expected as a result of PSCS implementation.

12.37 The focus of our report is to identify those variables that influence the

risks associated with systems under development. Our observations and findings are presented on subsequent pages under the following headings:

- Project Management and Monitoring;
- The Nature of Large Information Technology Projects; and
- Environmental Factors.

Project Management and Monitoring

12.38 The pressures of deficits and debt have prompted the government to embark on a number of initiatives aimed at improving service to the public and reducing costs for program delivery and overhead. One key initiative has been to introduce new information technology systems.

12.39 We noted a number of management-related weaknesses associated with the introduction of these systems. These include:

- inadequate analysis of underlying business issues;
- inconsistent support from management and project sponsorship;
- a lack of experienced resources on project teams;
- inconsistent user involvement and acceptance; and
- a lack of effective ongoing monitoring of systems under development.

Inadequate analysis of underlying business issues

12.40 If information technology is to be successfully implemented in a department or the government as a whole and contribute to modernizing its business processes, the organization's business needs must dictate the requirements for

the type of technology to be used. To ensure that this occurs, it is critical that departments with primary responsibility for the development of supporting business cases carefully analyze the processes or procedures that are to be modernized. In the case of central and common or shared systems, this responsibility is shared by the Treasury Board Secretariat. Such analysis would include:

- identifying alternatives to the existing processes that would meet the business needs of not only the department but the government as a whole;
- defining the respective roles, responsibilities and accountabilities of both departments and central agencies in relation to the business processes;
- determining exactly why the current processes are not working as well as they might; and
- setting clear performance expectations for the improved business processes.

12.41 Our 1987 audit of the then Department of Supply and Services indicated that the federal government's cost of compensation administration was, at that time, approximately twice that of comparable jurisdictions. In response to this observation, the Department initiated the PSCS project in an attempt to reduce the cost of compensation administration within the federal government by automating the existing processes.

12.42 The PSCS was designed to upgrade and modernize existing public service compensation systems within Public Works and Government Services Canada, with a view to improving service levels and reducing the cost of compensation administration within the Department.

12.43 A number of organizations play a significant role in the business processes for compensation administration. These include the Treasury Board Secretariat, which, on behalf of the Treasury Board, is responsible for developing and monitoring the human resource policy framework, under which the rules are set for payment of public servants, and Public Works and Government Services Canada (PWGSC), which administers compensation within the federal government.

12.44 As part of our audit we attempted to determine whether the approach to modernizing the compensation administration process within the federal government included sufficient analyses of the underlying business issues that influence the cost of compensation administration. We expected to find a thorough analysis of these issues by both PWGSC and the Treasury Board Secretariat.

12.45 It was recognized from the outset that the compensation environment was complex. The Secretariat also realized that the necessary legislative and collective bargaining changes needed to simplify the complexity would have taken years to complete. The Secretariat has stated that the need for a fully integrated compensation system such as that proposed by PWGSC was too great, and the significant savings to which PWGSC committed too alluring, for the project not to proceed. It appears, however, that the complexity of the compensation environment was not fully appreciated at the outset by either organization.

12.46 Public Works and Government Services Canada undertook the development of PSCS without the benefit of redesigning all components of the existing business procedures or processes. In this instance, the complexities of the compensation policy framework

It is critical that departments with primary responsibility for the development of supporting business cases carefully analyze the processes or procedures that are to be modernized.

Introducing information technology projects successfully requires the commitment and support of a project sponsor who is a member of senior management.

contributed significantly to the difficulties encountered in trying to develop this system.

12.47 The government anticipated that the cost of administering compensation would have been reduced had the PSCS initiative been successful. However, the system would not have achieved the full cost reduction potential because of the failure to analyze and resolve underlying business issues, which were a root cause of the high cost of compensation administration within the federal government.

12.48 If the government is to deal effectively with its administrative costs, it must take the current opportunities to re-engineer its business processes and consider the administrative cost of its policy framework.

12.49 We did not find any indication that the Secretariat had specified expected overall levels of performance for the government-wide cost of compensation administration.

12.50 We note that the Secretariat has recently initiated a pay and benefits re-engineering project to address some of these issues.

Inconsistent support from management and project sponsorship

12.51 Introducing information technology projects successfully requires the commitment and support of a project sponsor who is a member of senior management. We recognize that the term “project sponsor” is not currently defined or used within the government’s project management and information technology policy framework. Instead, the term “project leader” is defined as the person who is responsible for the management and implementation of the project in

accordance with its stated objectives. While this responsibility is of critical importance, it is not, in our view, sufficient. The concept of project sponsorship is more encompassing. An effective project sponsor is responsible for ensuring that the organization understands the value and importance of the project in contributing to the achievement of the organization’s objectives and, ultimately, for realizing the predicted benefits of the project.

12.52 In our audit we found that the effectiveness of project sponsorship varied from one project to another.

12.53 The Integrated Departmental Financial and Materiel Management System (IDFS) project illustrates effective project sponsorship and commitment from senior management. At Transport Canada, the project sponsor played a strong and active role. The sponsor’s involvement contributed to overcoming significant difficulties encountered shortly after the project’s inception.

12.54 Soon after Transport Canada signed the contract, it was realized that the project was in severe difficulty. The contract did not accurately reflect the requirements of the project, the project had slipped in its planned schedule, and costs were expected to increase. The sponsor of the project responded to these problems by:

- establishing limits on project costs, setting firm schedules, and defining the critical paths and the performance criteria for the system;
- restructuring the project management team and enlisting experienced managers who had strong contract administration and project management skills; and
- establishing an effective accountability framework that clearly

defined responsibilities and accountabilities for managing the project.

12.55 The sponsor's success was largely due to the effective teamwork that was fostered between his managers and the contractor. As a result, they assumed a professional, results-oriented approach to project management.

12.56 The Common Departmental Financial System (CDFS) project illustrates the consequences that can follow when roles and responsibilities within a project are not clearly established.

12.57 The CDFS development was initiated in 1989 to replace an existing government financial system (FINCON). CDFS was intended to meet the functional needs of a group of users, most of which were small-to medium-size departments, while satisfying the requirements of the central agencies. At the same time, the Treasury Board Secretariat initiated its Financial Information Strategy, a project that was intended to allow the Government of Canada to renew its financial system infrastructure and to develop a new set of guiding principles for financial systems and management.

12.58 In an attempt to reduce the number of financial systems within government, it was agreed that CDFS would be a preferred optional system of the Secretariat's Financial Information Strategy.

12.59 Under terms of an agreement signed by Public Works and Government Services Canada (PWGSC) and the then Office of the Comptroller General (now part of the Treasury Board Secretariat), as joint developers of CDFS, some of the respective roles and responsibilities for each organization were established. The agreement failed, however, to clearly establish a project sponsor. The

Comptroller General was responsible, in concert with the system's users, for defining functional requirements (what the system must do to satisfy users' needs), setting priorities, approving plans and monitoring the delivery and performance of the system. PWGSC, as product manager, was responsible for developing, implementing and maintaining CDFS.

12.60 By not clearly establishing the respective roles and responsibilities in this instance, each of the two lead organizations or joint developers looked to the other as being responsible for the successful introduction and acceptance of the project.

12.61 Many viewed the Office of the Comptroller General (OCG) as being responsible for the CDFS project because it was initiated under the auspices of the OCG's Financial Information Strategy. This view was reinforced by actions of the OCG, which, in the initial stages of the project, initiated and funded an independent review of the project to assess project status and risks. As well, the OCG established and co-chaired a CDFS Management Board, which was intended to provide a forum through which advice and guidance could be provided to PWGSC and through which user inputs could be provided.

12.62 By the end of 1992, the CDFS project had slipped significantly behind schedule, and the functional requirements had not yet been agreed upon. Furthermore, the government's Financial Information Strategy, which CDFS supported, had still not been finalized. (We note that at the time of this audit, the Secretariat had renewed its efforts to develop the Financial Information Strategy.)

12.63 After it became apparent that difficulties and delays were being encountered in completing the project, the

An experienced project team greatly increases the likelihood that an information technology project will be successfully implemented.

Research studies conducted within the private sector on causes of systems development failures have cited the lack of experienced project management as a significant factor that contributes to project risks.

Office of the Comptroller General, as one of the joint developers, quietly reduced its support for CDFS at the end of 1992, and did not actively encourage departments to consider the system. However, it did so without advising either PWGSC or the federal government financial community of its decision.

12.64 In this instance, decisive action was required to either support the continued development of CDFS or to cancel it. As a consequence of the failure to establish clear roles and responsibilities for the successful implementation of the system, approximately \$10 million has been spent since late 1992 on developing a system for which key elements of sponsorship are missing and for which user confidence has eroded.

A lack of experience on project teams

12.65 An experienced project team greatly increases the likelihood that an information technology project will be successfully implemented. Members of the project management team need to have experience, knowledge and expertise commensurate with the size and complexity of the project. They also need strong project management and leadership skills, a sound knowledge of the organization's business, and experience with the technologies being implemented.

12.66 The problem of lack of experienced project management is not one that is unique to government. Research studies conducted within the private sector on causes of systems development failures have cited the lack of experienced project management as a significant factor that contributes to project risks.

12.67 In all four of the projects reviewed as part of this audit, the project teams either did not, at the outset, have

experience with projects of similar size and complexity, or lacked experience with the technologies associated with the project. Although the teams developed experience as the projects progressed, their lack of experience at the start contributed to increased project risks.

12.68 In two of the four projects, the Integrated Departmental Financial and Materiel Management System(IDFS) and the Common Departmental Financial System(CDFS), key personnel were replaced at key points during the project. By the time this occurred, both projects had slipped significantly behind schedule. However, in the case of IDFS, those changes helped to turn a project that was in difficulty into one that is currently being effectively managed.

12.69 While changes in personnel within the CDFS project are helping to deliver a final product, they have not offset the delays that had already occurred. The delays, together with a rapidly changing business and technological environment, and a project for which roles, responsibilities and accountabilities were not clearly established, have meant that the developers cannot build the system quickly enough to catch up with the evolving expectations of those who may eventually use it.

Inconsistent user involvement and acceptance

12.70 The people who will use a system must buy into or accept the system as a prerequisite to its successful implementation and use. Acceptance can be achieved through ensuring that the system's users actively participate in the development process. For example, they should be involved in activities such as identification of needs and the review, approval and acceptance of completed work at key stages. Involving users in this

way will translate to a commitment on their part to the successful implementation of the system. As well, particularly in multi-year projects, user commitment must be regularly reinforced to ensure continuing support and to offset the impact of staff turnover in user groups.

12.71 In our audit we noted that the involvement of users varied from project to project.

12.72 The Income Security Program Redesign(ISPR) project provides an example of effective user involvement. Management of the ISPR project has taken seriously the issue of involving users, getting their buy-in and involving them in decision making. Realizing that the project would not be successful without careful management of organizational change, extensive consultation with end users was planned. For example, to involve users from the outset, management took a number of steps such as:

- establishing ongoing two-way communication among headquarters, regional implementation managers and end users to deal with concerns as they were raised;
- developing a mechanism for training and assisting staff in managing the effects of organizational change; and
- taking a demonstration installation to each regional office early in the project to allow all staff to see the new system and to ask questions of the contractor and members of the project team who accompanied the prototype. (This exercise allowed staff to see the “vision” of the kind of system ISPR would eventually be.)

12.73 The result of these efforts has been widespread support for the project among users at all levels.

12.74 In the Common Departmental Financial System (CDFS) project, the nature and extent of user involvement has fluctuated. At its inception, CDFS had two objectives. One was to replace an existing financial management system. The other was to meet all the requirements of the Financial Information Strategy being developed by the then Office of the Comptroller General. Today, because of the lack of user commitment and support, CDFS has only a small number of users. At the time of the audit, Public Works and Government Services Canada was the only department and there were three small agencies (of the approximately 20 users of the current system that CDFS was designed to replace) electing to use CDFS.

12.75 The primary forum for co-ordinating users’ input and providing guidance to PWGSC for the development of the system has been the CDFS Management Board. However, Board members whom we interviewed as part of this audit do not believe that they have had any meaningful involvement in or commitment to the project. Generally, potential users remain unconvinced that CDFS will provide them with the same level of performance and functionality that they have with existing systems. Although the department that conducted the pilot test of CDFS had committed significant human and financial resources to assessing the system, it decided not to implement the system. Deficiencies cited by potential users as reasons why they chose not to use the system include concerns over functionality and performance such as:

- slow response time;
- the lack of horizontal integration with other systems, such as materiel management; and
- the inability of the system to prevent issuing duplicate cheques without

resorting to manual processes outside the system.

12.76 Although the identification and correction of performance problems is a normal part of systems development projects, and although project management believes the performance concerns have been addressed, some potential users have adopted a wait-and-see attitude, while others have indicated that they will want to run their own pilot test before deciding whether or not to use CDFS.

12.77 As well, some potential users have indicated a desire to assess the outcome of the current initiative of the Treasury Board Secretariat to assess a number of commercial software packages.

12.78 Effective user involvement and commitment to the systems development project is critical to the project's success. The CDFS project illustrates two common problems. First, the rate of change of technology in today's environment invariably makes potential users more demanding. Accordingly, a project must have the flexibility to respond, where appropriate, to evolving expectations. Second, successful systems development projects and, in particular, shared systems, require continued user commitment or buy-in.

A lack of effective ongoing monitoring of systems under development

12.79 Successful implementation of large multi-year projects requires effective ongoing monitoring. Primary responsibility for ensuring delivery of projects and for adequate monitoring of their progress rests with the department managing the project. Traditionally, monitoring these projects has consisted of addressing such questions as:

- Will the system be delivered on schedule and within budget?
- Will the system deliver the expected benefits?
- Will users accept it?

12.80 While the answers to these questions are important, they do not, in themselves, cover all issues. Monitoring must also deal with issues such as the currency and continued relevance of the business case for developing the system. As noted previously, monitoring this area is essential because the operating environment is changing rapidly, and there is no certainty that the original assumptions on which systems were built will remain constant.

12.81 Accordingly, it is important that management has effective processes for managing systems under development. Such processes include:

- measuring and communicating project status with respect to cost, schedule and performance of the project;
- conducting risk assessments;
- tracking and monitoring all project costs; and
- monitoring changes in the business environment that may alter basic assumptions on which original business decisions were made.

12.82 The information provided by the consistent and effective use of such processes provides project managers with:

- a basis for communicating a project's status;
- a basis for focussing attention on areas that need corrective action; and
- a method for detecting trends (whether adherence to planned costs and schedules is improving or getting worse over time) in the project status of multi-year projects.

Effective user involvement and commitment to the systems development project is critical to the project's success.

12.83 We found that, in general, project management has processes that provide data on project status and identify those areas where corrective action is needed. We also noted that these processes were not always fully implemented and effectively operating until some months after projects began. In our view, it is important that such tools be part of the management infrastructure from the outset of the project. In all four of the projects reviewed, information on project risk was available. In some instances, specific internal audits of the systems development initiatives had been conducted, and in others, independent studies had been commissioned by management. However, despite the availability of information on project status, management has generally not been effective in reducing the risks associated with these large multi-year projects.

12.84 We are also concerned over the time it takes to initiate corrective actions. The Income Security Program Redesign project illustrates this point. While project monitoring identified delays in the information technology component of the project in July 1994, effective corrective action, in terms of revised plans and schedules, was not completed until April 1995.

12.85 As discussed below, we noted that improved procedures are required for monitoring time used by project team members in completing tasks.

12.86 We found that the extent of tracking of project hours varied from one project to another. In most instances, Crown time devoted to a project was not tracked and, in some instances, information on contractor time was not provided to project managers. Under fixed price contracts, such as those in place for the systems we reviewed, this information

does not affect the price that the Crown is required to pay. However, the nature of the contract has been used by contractors as a reason not to provide project management with full information on the time taken to complete specific tasks. In our view, such information is an essential component of sound project management.

12.87 Complete information on time used for a project provides management with information on levels of effort expended to achieve the results to date. It is also required to predict whether more or fewer resources will be needed to complete the project on time.

12.88 Such information is critical to assessing the continued relevance of the original business decisions and is a necessary first step to respond to the changing business environment.

12.89 Monitoring by Treasury Board Secretariat. While departments have primary responsibility for adequate monitoring of the progress of their projects, there is also a responsibility on the part of the Secretariat, because of its overall responsibility for the financial management of government, to monitor projects of significance and risk.

12.90 We expected that the following key areas would be monitored:

- project status relative to planned progress, in terms of time, costs and schedule;
- achievement of expected benefits;
- continued relevance of original assumptions on which projects were approved; and
- risk factors that might affect the project.

12.91 We also expected that the information flowing from these monitoring efforts would be used, when

Despite the availability of information on project status, management has generally not been effective in reducing the risks associated with these large multi-year projects.

Studies have indicated that the likelihood of a system either falling significantly behind schedule or failing to be implemented increases with the size of the project.

necessary, to recommend and, if necessary, initiate corrective action.

12.92 We noted that the Secretariat receives information on project status from departments, and in general, that this information is reviewed and analyzed. In some instances, the Secretariat has, either on its own or in concert with other departments, initiated corrective action. For instance, in response to concerns about delays in the CDFS project, the Secretariat initiated and funded an independent review of the status and risks associated with the project. In other instances, for example with respect to PSCS, while concerns were identified, actions were either late in coming or ineffective in resolving the concerns noted.

12.93 We also reviewed the nature and extent of the Secretariat's monitoring of the effectiveness of its information technology policy framework in contributing to the successful introduction of systems development initiatives.

12.94 We anticipated that such monitoring would consist of the tracking and analysis of information technology spending within the federal government, and an assessment of the reasons for past successes and failures. In our opinion, such data and analysis are essential for assessing the effectiveness of the information technology policy framework.

12.95 We found that while the Secretariat has data on individual departmental projects, such data are not analyzed, from a government-wide perspective, to assess the effectiveness of the policy framework. The Secretariat has not regularly captured and disseminated lessons learned from past successes or failures as a basis for future improvements.

12.96 We noted that in response to concerns raised by departmental deputy ministers, the Secretariat has begun an examination of all aspects of the management framework for large information technology projects.

The Nature of Large Information Technology Projects

12.97 Our audit noted several factors related to the inherent nature of large multi-year, multi-million dollar projects that influence the risk of successfully implementing information technology projects. These findings are set out in subsequent pages under the following headings:

- Project size;
- Technical complexity; and
- Risks associated with uncertainties about functional requirements.

Project size

12.98 The implementation of any systems development project carries with it a degree of uncertainty and risk, which can be magnified many times over as the size of the project increases. Studies have indicated that the likelihood of a system either falling significantly behind schedule or failing to be implemented increases with the size of the project. For this reason, it is important that the analysis of projects in their planning and approval stages includes measuring their size and complexity.

12.99 One such measurement technique used in the software development industry is called Function Point Analysis (FPA). This technique provides management with a relative estimate of the size, complexity and risks associated with a project.

12.100 In FPA terms, any project containing more than 5,000 "function points" is considered complex and entails

significantly more project risk. A function point can be considered to be a task that the computer software must perform. Research on FPA carried out in the United States has shown that systems development projects that have more than 10,000 function points have about a 50 percent chance of being cancelled before they are implemented.

12.101 The use of software metrics does not, by itself, guarantee success in implementing information technology. However, the use of such techniques is an integral component of sound project management, which provides management with a benchmark for measuring the size and complexity of a proposed initiative, as well as an indicator of the levels of risk that a project may face.

12.102 We noted that such measurement tools had not been used during the development of the business cases for any of the systems included in this audit. For two of the four systems, management had completed a function point count only after the projects had begun:

- The count revealed more than 25,000 function points for CDFS, as it was originally envisaged in 1990. After the project was scaled down in 1992, it contained about 16,000 function points.
- PSCS, as originally planned, contained about 14,000 function points.

12.103 While no function point analysis was completed for the ISPR and IDFS systems development projects, our review of these systems indicated that the size and complexity of these systems were about the same as PSCS and CDFS. We noted that in the case of ISPR, management did use alternative measurement techniques to assess the size of the project in functional terms.

12.104 By comparison, some private sector organizations that use function point analysis will not, because of the associated high risk, undertake systems development initiatives that exceed 5,000 function points.

Technical complexity

12.105 The risk of being unable to successfully implement a systems development project increases with the technical complexity of the system itself. Technical complexity refers to the design features or architecture of the system, such as the system's links to networks, its data conversion features, and the extent to which it is designed to accommodate multiple users working from remote terminals.

12.106 The complexity of the four systems reviewed as part of this audit varied, as did the reasons for their complexity.

12.107 For example, Transport Canada acquired a commercially available software package for the IDFS project and modified it to meet the Department's needs. In this instance, the modifications involved developing interfaces with existing departmental systems and the government's central accounting systems and customizing some of the system's reporting features.

12.108 While the acquisition and installation of a commercially available software package should have been the least complex of the systems we reviewed, the extensive modification of the software to meet the needs of the Department and to be integrated with central accounting systems significantly increased the project complexity.

12.109 As well as adding complexity, such modifications may make the implementation of new releases of the software more difficult and costly.

In such instances, project complexity and cost could be reduced through greater adherence, on a government-wide basis, to common standards and architectures.

Initial estimates of project costs prepared by departments often significantly differed from the ultimate cost of a project.

12.110 The use of commercially available software offers the potential for cost savings. A significant portion of the savings comes from limiting the extent of changes to the commercial software package. Within the private sector, a guideline often used for changes to commercial software is to limit them to less than 10 percent of the functionality (what the system will do for its users) of the software package.

12.111 In contrast, the remaining three systems had aspects that are, or were, significantly more complex.

12.112 For example, in the case of CDFS, the developer faced the task of building a shared system that would interface with many different departmental systems and architectures, all of which added to the general complexity of the project.

12.113 In such instances, project complexity and cost could be reduced through greater adherence, on a government-wide basis, to common standards and architectures. Such increased standardization across departments would also facilitate achievement of the government's objectives.

Risks associated with uncertainties about functional requirements

12.114 In each of the four systems reviewed, we noted that the functional requirements (what the system must do to satisfy the needs of those who will use it) had been articulated at the time the project had been approved and initiated. However, as all four projects progressed, it became clear that the requirements, as originally stated, needed to be either restated, refined or more clearly communicated.

12.115 The impact of any uncertainty arising from imprecise requirement statements affects two key areas:

- project budgeting; and
- project approval.

12.116 Project budgeting. We noted in our audit that initial estimates of project costs prepared by departments often significantly differed from the ultimate cost of a project. The change in estimates can affect a project in one of two ways. The first possibility is that project costs will rise as the understanding of the project improves. For example, as the refinement of the PSCS design progressed, the original cost estimate of \$55.1 million rose to \$90.3 million and, eventually, to \$119.5 million.

12.117 However, at the same time, the expected savings in departmental operating costs, after successful implementation of the system, rose from an initial estimate of approximately 300 person-years to 781 person-years.

12.118 The second possibility is that in order to keep project costs stable, the project requirements will be reduced to match the funds available. This means the system will perform fewer functions than were originally planned, which may increase the risk that the system will fail to meet users' expectations or needs.

12.119 The IDFS project provides an example of a project where scope was reduced to stay within the original budget. In order to maintain the \$60 million ceiling for the project and to avoid an estimated \$20 million increase in contract price, management decided to redefine and prioritize the original scope of work to eliminate some items, while maintaining what management considered essential functionality.

12.120 A decision to reduce a system's scope is sometimes reversed after it is

discovered that the “downsized” system will not adequately meet users’ needs. In these cases, subsequent contracts or enhancements can add significantly to the project cost. This happened in the case of the CDFS project. In 1992, to facilitate earlier delivery of some components of the projects, approximately one third of the system’s original requirements were eliminated. While the project scope was reduced, the contract price remained constant. This functionality has since been reintroduced at an approximate additional cost of \$10 million.

12.121 We also noted that estimates of project cost do not include all costs associated with implementing the system. Estimates include only the costs of obtaining goods and services from suppliers or contractors, and not the substantial departmental resources expended to develop and implement the system.

12.122 Approval process. We are concerned that failing to clearly define the scope and systems requirements for the projects that we reviewed has had implications for the approval process. From the above-noted observations, it is apparent that the inherent nature of large, multi-year projects does not allow project sponsors to predict with confidence what the ultimate cost of the project will be.

12.123 A similar concern was expressed by Treasury Board ministers at the time of the second Treasury Board submission for PSCS when estimated project cost had risen by \$35 million.

12.124 Within the scope of our audit, we wanted to assess the nature and extent of Treasury Board Secretariat analysis of the business case submitted by departments in support of their project initiative. Because of the strategic importance of information technology in reducing costs and

improving services, we had expected that the Secretariat’s analysis of departmental submissions would include a thorough analysis of full project costs, projected savings and assessment of the risks associated with the project.

12.125 However, in our view, the analysis was not sufficient for the purposes of providing a recommendation or advice to Treasury Board ministers as to whether a project should be approved and funded at the level requested.

12.126 The analysis of the submission for PSCS illustrates this weakness. In this instance, the Secretariat did review and comment on the submission and asked the Department, PWGSC, for clarification on the draft submission. However, we found little evidence of extensive analysis of estimated project costs to assess the reasonableness of the requested funds or analysis of projected savings to assess their reasonableness.

12.127 Finally, the analysis done by departments and by Treasury Board Secretariat should be sufficient to provide as complete information as possible on which to base the system investment decision. This analysis should provide assurance that:

- project benefits are realistic when project approval and funding are sought;
- users’ expectations are realistic and affordable; and
- realistic estimates of project costs and competence required are presented, along with the impact of these on the scope of work.

Environmental Factors

12.128 The business environment within which we operate is continuously changing, with the only seeming certainty being that the rate of change will continue to accelerate. In recent years, the number

of changes and the pace at which they are occurring, both globally and within government, has sometimes outpaced the ability of systems developers to respond to them.

12.129 Key environmental factors include:

- a changing business environment; and
- rapid advances in technology.

The changing business environment

12.130 For each system that we reviewed, the business environment, under which the initial decision to build the system was made, is no longer relevant. The examples below demonstrate the risk associated with developing large systems that take years to develop, in a situation where the business environment is continuously changing.

12.131 Changes to the business environment have affected Transport Canada's Integrated Departmental Financial and Materiel Management System (IDFS). When the Department initiated the system in 1990, it employed 20,000 people and included airport, aviation and coast guard operations. The size and operations of Transport Canada in 1995 and beyond differ greatly from what they were when the project started. Today, Coast Guard operations have been transferred to another department, air navigation services are proposed to be transferred to a not-for-profit organization outside government, airports are being privatized and projections reflect a Department of 3,000 to 5,000 employees. All these changes equate to a very different business environment than when work on IDFS began.

12.132 As a consequence of the many factors that have changed the operating environment of Transport Canada, the Department had significantly more licences for its commercial software than would be needed for its new operating environment. To mitigate the impact of the changing environment, the Department, in conjunction with PWGSC, has negotiated a transfer of surplus licences to four other departments, one of which is implementing IDFS.

12.133 In the case of the Income Security Program Redesign (ISPR), some of the basic assumptions that governed the decision to build the system have changed. Initially, it was assumed that the system would administer the three elements of the social security framework: Family Allowance, Old Age Security and the Canada Pension Plan. Since the project was initiated, the Family Allowance program has been replaced by the Child Tax Benefit program and is administered by Revenue Canada through the taxation system. The federal Budget of February 1995 indicated that the government would conduct a review of the public pension system and was making changes to the Old Age Security program. The results of this review may impact on the original assumptions under which ISPR began.

12.134 To mitigate the impact of a rapidly changing business environment, it is important that large systems development initiatives be broken down into smaller, more manageable components, with each component delivering an improved capability (efficiency or effectiveness). Under such an approach, if environmental changes affect systems development requirements, the government has still achieved a

For each system that we reviewed, the business environment, under which the initial decision to build the system was made, is no longer relevant.

benefit and payback from the implementation of earlier components.

Advances in technology

12.135 When the Common Departmental Financial System (CDFS) was initiated in 1988, users' expectations focussed on vertical integration of the system with the central accounting systems. Since initiation of the system, users' expectations have dramatically evolved in response to a changing environment and the availability of new and emerging technologies. Today, users' expectations of what constitutes an acceptable financial accounting system require not only vertical integration with the central accounting systems but also horizontal integration with other departmental business applications, such as materiel management and human resource information systems. Although the expectations of users have changed, the system's developers have not been able to respond quickly enough. Therefore, the system does not provide the benefits of horizontal integration, which users are demanding.

Conclusions and Recommendations

12.136 The government has placed significant emphasis on its ability to successfully implement information technology as a means of reducing its costs and improving service to the public.

12.137 In our audit we have identified a number of risks that influence the successful implementation of systems development projects:

- weaknesses in project management;

- the lack of effective ongoing monitoring and/or appropriate corrective action;

- the nature of large information technology projects; and

- the impact of environmental factors.

12.138 We have observed the significant impact that occurs when these risks are not effectively managed. In its attempts to develop PSCS, Public Works and Government Services Canada has spent approximately \$61 million, of the estimated total project cost of \$119.5 million, for which the planned benefits will not be realized.

12.139 Many factors affect the successful development and implementation of systems. Among the most critical to the successful management of project risks are:

- effective project sponsorship;
- clearly stated requirements;
- effective user involvement in and commitment to the success of the project; and
- the expertise and experience of resources dedicated to the project.

12.140 An integral component of any new approach must focus on the implementation of long-term information technology strategies through smaller, more manageable components, each of which provides an improved capability (efficiency and/or effectiveness) to the organization.

12.141 Such an approach provides certain key benefits:

- It is easier to more clearly define requirements (what the system should do for its users).
- The likelihood of successfully completing the project is greater.

An integral component of any new approach must focus on the implementation of smaller, more manageable components, each of which provides an improved capability (efficiency and/or effectiveness) to the organization.

- It is possible to develop more complete, accurate estimates of costs and schedules.
- It is easier to obtain project resources with appropriate levels of experience.

12.142 To increase the likelihood of successfully implementing systems development projects, departments and Treasury Board Secretariat should give immediate attention to improving current practices for approving, funding and managing such projects.

12.143 We encourage and support the Treasury Board Secretariat's efforts to renew the current management framework for systems under development.

12.144 Future audits will monitor the progress of this initiative and will continue to examine issues that affect the successful implementation of systems development projects.

***Public Works and Government Services Canada response:** The Department shares the concerns of the Auditor General with respect to the risks of systems under development.*

As part of its recent evaluation of Common Purpose Procurement (CPP), PWGSC conducted its own investigation into the difficulties experienced with large-scale information technology systems and how these might be overcome. The results of this work indicated that improvements could only, meaningfully, be realized through a co-operative effort between ourselves, Treasury Board Secretariat and, of course, the sponsoring departments for the projects involved.

This perspective was endorsed when our research was presented to the Treasury Board Subcommittee on Information Technology (TIMS) on April 28th of this year. At that time, a co-ordinated, interdepartmental Action Plan to address areas of major concern and from which

improvement efforts are expected to result in the greatest benefits was agreed to.

Public Works and Government Services will continue to strengthen the skills our staff bring to the contract and risk management associated with information technology and systems integration (IT/SI) projects; examine the potential for providing project management expertise for such initiatives; consult with stakeholders regarding how to assess the achievement of value for money in IT/SI projects; and collaborate with Treasury Board Secretariat in examining issues concerning partnering arrangements.

Treasury Board Secretariat has undertaken to ensure the adequacy of policies, standards and tools for the management and delivery of IT/SI projects, including risk, project and contract management; to determine acceptable partnering relationships for IT/SI projects; and to collaborate with PWGSC and the broader community to resolve project management issues and to further develop the successor to CPP.

Sponsoring departments will be obliged to meet the requirements set out by Treasury Board, including the assurance that sound business cases and superior project and risk management skills are brought to major systems projects.

More specific to the systems reported in the OAG audit, the measures taken by the Department to reduce risks include:

1. *Responsibility for design and construction of the system was contracted out to major systems integration firms (PSCS and CDFS).*
2. *Risks of unclear user requirements or overly optimistic construction estimates were mitigated by the use of competitive tenders, independent reviews of project size (PSCS and CDFS), as well as funding of the design phase to two systems integration firms (PSCS).*

3. *Detail reporting was required from the contractor on time and performance (PSCS).*

The fact that these were not successful, as expected, in reducing risks, highlights the need for the Crown to understand the industry track record as well as to manage the risk that contractors will fail to perform well on complex fixed price software development projects. With hindsight, the Crown placed excessive confidence on the industry's ability to deliver. Consequently, we agree with the Auditor General that organizing smaller projects would reduce risks.

Recent work on the CDFS product has in our view addressed any remaining concerns with the functionality of the system. Nevertheless, in light of the environment described by the Auditor General, the Department has decided to suspend active marketing of the system to other government departments and to focus its efforts on implementing CDFS within PWGSC and on supporting its committed clients. While this client base does provide adequate returns to the Crown for its investment in the system, more consistent support from the Treasury Board Secretariat would undoubtedly have helped to increase its return on the investment.

Finally, while the Department is convinced that the notion of "project sponsorship" is critical to the success of common shared financial and administration system development, current circumstances and the accountabilities of the central agencies, departments and the common service department, preclude the effective application of this concept.

In the future, the Department will continue to adhere to professional standards of project management, take a balanced approach to achieving cost reductions through a combination of organizational, procedural and technological change, and

review the opportunities for smaller, and shorter duration projects.

Treasury Board Secretariat response: *The Treasury Board Secretariat generally concurs with the findings of the Auditor General. These findings are consistent with a separate analysis that TBS has conducted. As both studies point out, technology is complex and ever-changing and its acquisition carries inherent risks. Nevertheless, information technology is a crucial part of the government's thrust to help improve quality service to the public while reducing the cost, and information acquisition projects must continue. While the risks cannot be eliminated, whether in the public or the private sector, we agree they can and must be reduced.*

The Treasury Board Secretariat has begun the introduction of changes to the management framework for large information technology projects. These changes will potentially affect all aspects of the project environment, including project size, approvals, risk assessment, project management experience and training, procurement vehicles, change management, reporting and monitoring. We are confident that the improvements will significantly improve the success rate of government informatics projects. Treasury Board Secretariat will be monitoring high risk projects closely to ensure effective implementation of the new approach.

We thank the Auditor General's Office for its support and look forward to its continued involvement in this work.

Human Resources Development Canada response: *The Department generally concurs with the findings of the Auditor General and shares the concerns expressed with regard to the risks inherent to systems development projects. The Department will continue to manage the risks associated with the ISP Redesign project, placing additional emphasis on those areas identified in the report. We would also endorse the observation that*

*“large multi-year system development”
projects are unlikely to be successful,
unless the project is broken down into*

*smaller, more manageable components
with significant user involvement at all
times.*

Audit Team

Greg Boyd
Guy Dumas
Ira Greenblatt
Christine Kelly
Laurel Lowry
William Moeller
Gerry Montigny
Richard Quesnel
Hugh Rodgers
Marvin Schwartz
Bruce Sloan
Barbara Taylor
Peter Taylor

For further information, please contact Eric Anttila, the responsible auditor.

Report of the Auditor General of Canada to the House of Commons – 1995

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**Report of the
Auditor General
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to the House of Commons**

Chapter 13
**Canadian International Development Agency:
Phased Follow-up of the
Auditor General's 1993 Report – Phase I**

October 1995

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Chapter 13
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Auditor General's 1993 Report – Phase I



October 1995

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Chapter 13

**Canadian International
Development Agency**

Phased Follow-up of the Auditor
General's 1993 Report — Phase I

The audit work reported in this chapter was conducted in accordance with the legislative mandate, policies and practices of the Office of the Auditor General. These policies and practices embrace the standards recommended by the Public Sector Accounting and Auditing Board (PSAAB) of the Canadian Institute of Chartered Accountants.

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Foreword

A New Approach: “Phased Follow-up”

13.1 An important element in our work is our follow-up on actions taken by departments in response to concerns raised in previous Reports of the Auditor General. Normally we conduct follow-up work two years after the completion of an audit and report it in the Follow-up chapter of our annual Report.

13.2 This chapter represents a new and innovative way of reporting to Parliament on how an organization has responded to our audit report. This approach, called a “phased follow-up”, calls for active participation by not only this Office but also the audited organization. In this context, we made an effort to work with CIDA to ensure that the concerns set out in our 1993 chapter were understood more widely. We also commented upon a number of proposals developed by the Agency with a view to indicating whether they addressed our recommendations.

13.3 The “phased follow-up” approach is designed to reinforce the organization’s accountability to Parliament. It is intended to foster greater ownership by a department or agency of the concerns raised by the Auditor General and a greater commitment to implementing measures to address them. The approach enables this Office to be more efficient by directing its attention to new or continuing concerns. It also has the potential both to build constructive working relations between the two organizations and to serve as a model for other organizations.

13.4 As we explain in detail below, a great part of this chapter was written by CIDA (Canadian International Development Agency) and reflects that agency’s assessment of its progress on the various concerns that we reported in our 1993 Report. Our audit work at Phase I was limited to a review of documentation provided by CIDA in support of representations in the Agency’s self-assessment (Phase I) of actions taken since 1993. In view of the limited scope and special nature of our audit work in this phase and of that scheduled for Phase II of the follow-up, the assurance we can provide on an interim basis is limited to whether our principal concerns are being addressed by the Agency. Consequently, this approach has one limitation. It does not allow the auditor to provide an opinion on the extent of progress made by the audited organization until the end of the third phase of the follow-up when all the audit work is completed. Nevertheless, in our view this approach provides useful and timely information to parliamentary committees involved in providing ongoing oversight of the actions the audited organization is taking toward its renewal. To distinguish that part of this chapter for which CIDA is responsible and that part for which we are responsible, CIDA’s portion is on screened paper.

13.5 We believe this “phased follow-up” approach allows us to explore a new and likely more cost-effective way of reporting to Parliament on significant concerns previously raised by this Office about renewal in the public sector. The Office will review the appropriateness of this new approach in due course.

CIDA’s Phased Follow-up: A Working Example

13.6 The present chapter is based on our 1993 work with CIDA. In our 1993 Report, CIDA stated that it agreed with our findings and with the thrust of our recommendations aimed at improving its accountability and strengthening its management effectiveness. The Agency committed itself to taking action to address the concerns raised in the Report. It invited us to monitor the implementation of its reforms and report on them to Parliament in 1995.

13.7 In 1994, CIDA and the Office of the Auditor General agreed that we would conduct a phased follow-up of the 1993 audit by monitoring, over a three-year period, the implementation of CIDA’s plan for its renewal. The phased follow-up work would focus on CIDA’s actions to address the main concerns raised in our 1993 Report.

13.8 This 1995 chapter builds on an earlier example of collaboration with the Agency. For our 1994 Report, CIDA worked with us to prepare an assessment of its progress in addressing our concerns about regional development banks, raised in our 1992 Report.

Foreword (cont'd)

Scope and Approach

13.9 The phased follow-up audit is planned to be carried out in three phases:

- *Phase I* consists of two parts: first, the Agency's self-assessment of the actions taken as part of its renewal to address the principal concerns raised in the 1993 Report; and second, the development of a Performance Measurement Model by CIDA. This chapter provides the results of the first part, the Agency's self-assessment, as well as our comments. The second part was under way at the time of writing. We will cover this part in Phase II.
- *Phase II* will cover CIDA's progress in implementing the model it is developing to measure and report on the performance of its bilateral programs and projects. It will consist of CIDA-led pilot projects to illustrate the application of its Performance Measurement Model (completed in the second part of Phase I) in the field. This work began in the fall of 1995. It is proposed that CIDA's self-assessment on the results of Phase II, as well as our comments, be provided to Parliament in the Auditor General's 1996 Report. To aid us in commenting on CIDA's self-assessment, we will participate alongside CIDA's staff in the field in examining the feasibility of CIDA's model for assessing the Agency's projects and programs.
- *Phase III*, which we plan to report on in 1997, will consist of an audit of selected country programs and projects. To the extent CIDA's Performance Measurement Model is judged acceptable by us, we intend to use it in the audit. The audit will focus on the measurement of CIDA's results, particularly its projects and the systems and procedures for reporting to the Minister and Parliament on the Agency's performance.

13.10 This three-phased approach to monitoring CIDA's actions in response to our 1993 Report offers a number of distinct advantages. First, it recognizes that CIDA has set for itself a benchmark against which it can be judged by Parliament. Second, it allows the Agency to present to Parliament a self-assessment of its actions. Third, it allows us to provide constructive comments to management, and information to Parliament, on a more timely basis. Fourth, it enables us at the end of the three-year period to provide assurance to Parliament as to the fairness and completeness of the Agency's self-assessments. Fifth, it recognizes that it takes considerable time to implement major reforms in large, complex and international organizations like CIDA. Finally, it should allow us in due course to conduct our regular audit work more cost-effectively as a result of the reliance we expect to be able to place on strengthened internal review mechanisms of the Agency.



Assistant Auditor General: Richard B. Fadden
Responsible Auditor: Vinod Sahgal

Canadian International Development Agency

Phased Follow-up of the Auditor General's 1993 Report — Phase I

Main Points

A New Approach: Phased Follow-up

13.11 An important element in our work is follow-up of actions taken by departments and agencies in response to concerns raised in our previous Reports. This chapter represents a new and innovative way of reporting to Parliament on how an organization has responded.

13.12 A three-phased follow-up approach has been designed to reinforce CIDA's accountability to Parliament. An ongoing self-assessment by the Agency on its progress in dealing with concerns raised by the Auditor General is central to this approach. It is intended to foster greater ownership by the Agency of such concerns and a greater commitment to implementing measures to address them.

13.13 Our opinion on the extent to which CIDA's actions have satisfactorily resolved the concerns raised in our 1993 Report will be rendered in 1997 after all our audit work is complete.

CIDA's Self-Assessment (Phase I)

13.14 CIDA has begun a major initiative aimed at transforming the Agency into a more results-oriented, focussed, efficient and accountable organization. The initial focus of this initiative was on management practices. In the Agency's view, progress to date has been significant.

13.15 Over the next two years, CIDA will concentrate on ensuring that its reforms are translated into program delivery in the field. The Agency is confident that the continuation of renewal will lead to the satisfactory resolution of the main concerns raised by the Auditor General in his 1993 Report.

Our Comments on Actions Reported by CIDA

13.16 CIDA's self-assessment report addresses the principal concerns raised in our 1993 Report. The Agency has developed a results-based management concept to strengthen its effectiveness. The clarity with which CIDA has acknowledged its accountability to Parliament for results and the emphasis it is placing on coherence in pursuing the government's priorities in Official Development Assistance are noteworthy.

13.17 Insightful analysis of Canada's strengths and how they correspond with developing countries' needs, as well as courageous decisions, will continue to be required to achieve the policy objectives set by the government.

13.18 The need remains for developing a contracting approach that defines the respective accountabilities and risks of both CIDA and its executing agents in the new context of results-based management.

13.19 There is also a call for greater transparency. Canadians want to be sure that their aid dollars are being used effectively — that their help is making a difference in the lives of people benefiting from Canadian assistance by increasing their self-reliance.

13.20 It would therefore be timely to accelerate the development of indicators that are simple and usable for measuring and reporting on the Agency's results. Any further delay in this area could well adversely impact on CIDA's credibility. CIDA needs a comprehensive tracking and reporting system to assess the quality and status of its projects.

Main Points (cont'd)

13.21 The report on Phase II of the “phased follow-up”, due in 1996, will focus on how successfully CIDA has commenced implementing its results-based management concept in the field.

13.22 In a time of substantial budget cutbacks, it is more important than ever that CIDA be in a position to demonstrate to Parliament which of its channels and program instruments are yielding the best results in achieving those objectives that have the highest priority.

Introduction

13.23 Since 1968, CIDA has been the federal government's main arm for administering Canada's Official Development Assistance. We pointed out in 1993 that CIDA's annual expenditures on bilateral economic and social development assistance had exceeded one billion dollars — over half of its share of Official Development Assistance (ODA) to developing countries. (In 1995–96 this is equivalent to 880 million dollars and remains over half its share of total ODA to developing countries — see Exhibit 13.1). The rest of the Official Development Assistance provided by CIDA was delivered mainly through funding to multilateral institutions such as United Nations programs, to international financial institutions such as the regional

development banks, and to a multitude of non-governmental organizations such as CARE.

1993 Report Raised Concerns

13.24 In 1993, we audited CIDA's management of bilateral economic and social development programs with a view to:

- providing objective information, advice and assurance to help Parliament scrutinize CIDA's use of its resources and management for results;
- promoting accountability and good practices by CIDA in managing for results; and
- highlighting areas for improving the Agency's management of its country programs and projects.

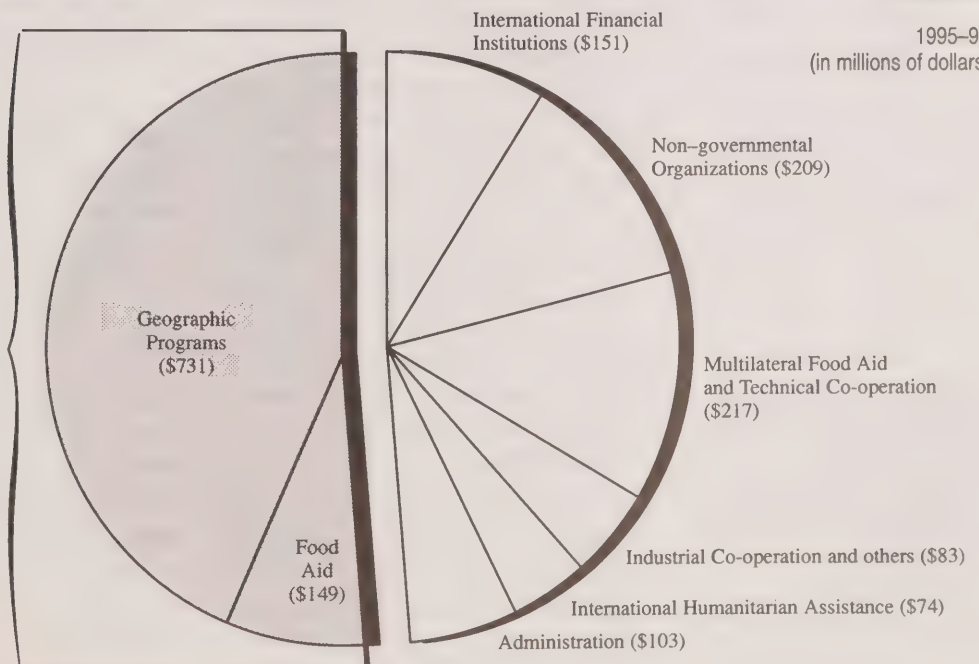
13.25 Chapter 12 of our 1993 Report dealt with CIDA's stewardship of the

Exhibit 13.1

Main Components of CIDA's Share of Official Development Assistance

1995–96
(in millions of dollars)

Bilateral economic and social expenditures (\$880 million) represent over one half of CIDA's share of Official Development Assistance (\$1.717 billion)



Source: CIDA Part III Main Estimates 1995–96

There is considerable scope to improve CIDA's performance in promoting enduring benefits from its investments.

funds entrusted by Parliament, in the context of the principles and priorities of Canada's policy on Official Development Assistance.

13.26 Our audit coincided with a Strategic Management Review conducted by the Agency at the request of its Minister. Both examinations identified some important lessons from CIDA's 25 years of experience, in particular the need for the Agency to improve its base of knowledge on development needs and approaches; increase the relevance of its aid program through better dialogue with its stakeholders; and reduce its delivery costs.

13.27 The principal concerns raised in the 1993 Report were 1) the need to improve CIDA's accountability and 2) strengthen its management effectiveness. The Main Points of our 1993 audit and the conclusions we reached were outlined in the 1993 Report, paragraphs 12.1 to 12.6:

- Official Development Assistance is a significant aspect of Canada's foreign policy. For 25 years CIDA has been the main conduit for delivering development assistance. Annual expenditures for bilateral economic and social development assistance exceed one billion dollars.

- We conducted this audit taking into account the increasing international awareness that continued investment in development projects that are not likely to be sustained beyond donors' financial assistance represents a questionable use of scarce resources.

- In its ability to meet development needs of the nineties, the Agency has been losing ground. Current performance has not maximized the use of resources and has not led sufficiently to self-reliant

development. There is considerable scope to improve CIDA's performance in promoting enduring benefits from its investments.

- CIDA's bilateral programs need to concentrate more on those countries and activities where there is the greatest potential.

- Lessons learned from 25 years' experience show a need to resolve conflicts among multiple objectives and to establish a more results-oriented, focussed, businesslike and accountable style of operation. They also call for dedication to the basic objectives, such as fighting poverty and helping people help themselves, that Canada has affirmed repeatedly over many years.

- None of these changes will be easy to make, since they will require a change in mindset, skills and culture, and strong ministerial support. Their successful implementation will depend on the will to reform, not only among management and staff of the Agency but also among those who act as its development partners in Canada and in the developing countries where CIDA operates.

13.28 CIDA agreed with our findings and with the thrust of our recommendations aimed at improving its accountability and strengthening its management effectiveness. The Agency committed itself to taking action to address our concerns.

13.29 CIDA has embarked on an ambitious undertaking aimed at its renewal. The plan for this undertaking incorporates the actions necessary to address the concerns raised in our 1993 Report. The Agency provided this plan, "CIDA Renewal Plan 1994-1995", to the House of Commons Standing Committee on Public Accounts in the spring of 1994,

CIDA has embarked on an ambitious undertaking aimed at its renewal.

following the Committee's hearings on the 1993 Report chapter on CIDA.

13.30 During 1994, officials of the Agency also testified at the Standing Committee on Foreign Affairs and International Trade. Both committees expressed interest in CIDA's renewal. The Special Joint Committee Reviewing Canadian Foreign Policy recommended that the House of Commons Standing Committee on Foreign Affairs and International Trade or the Senate Foreign Affairs Committee hold regular reviews of CIDA's performance. Accordingly, further hearings can be expected to monitor the implementation of renewal at the Agency. Our phased follow-up work provides a mechanism for a continuing dialogue among Parliament, CIDA and this Office on an important aspect of Canadian foreign policy.

13.31 The Agency's budget has since been under continuing pressure. Significant cuts were announced in the 1995 Budget documents. These cuts impact on the resources available to manage the Agency. It is increasingly apparent that CIDA will require continued strong leadership and a more action-oriented style of management toward the field to implement fully all the significant changes proposed in its initial plan for renewal.

13.32 Having recognized that CIDA's renewal will take several years, we reached an understanding with the Agency on a phased follow-up approach to the 1993 chapter, including the time frame for the work.

13.33 Because of the complexity of the task and the length of time and effort needed for CIDA to implement fully the significant reforms it has proposed, we believe that the Agency should be given the first opportunity to report on its

progress. We see our role at this initial stage mainly as one of encouraging management to continue on its renewal course, move ahead quickly and take the necessary risks associated with implementing significant change. We will monitor the Agency's progress and assess the completeness and fairness of its reporting thereon to Parliament.

CIDA's Actions to Address These Concerns

13.34 This chapter contains CIDA's self-assessment of actions it has taken since 1993. It includes CIDA's report on its measures for implementing reforms as part of its renewal effort, and our comments on actions reported by CIDA.

Methodology for Conducting Phase I of the Phased Follow-up

13.35 Our main objectives for the three phased follow-up audit are to assist management and parliamentarians with an appraisal of the fairness and completeness of CIDA's self-assessment and to promote transparency in its ongoing efforts toward renewal. In Phase I (see Exhibit 13.2) we asked the Agency to provide us with a report on its self-assessment of the actions taken since 1993 together with appropriate documentation to support its representations. We reviewed CIDA's report and inspected the supporting documents provided to us to determine whether the representations address the main concerns raised in our 1993 Report. We then formulated comments on CIDA's self-assessment. A primary purpose of providing these comments to Parliament is to assist the concerned parliamentary committees to monitor CIDA's progress, assess directions (trade offs) and provide support. We did not seek corroborative evidence from operating management at headquarters or in the field at this stage. However, we will expand our audit work

CIDA will require continued strong leadership and a more action-oriented style of management toward the field.

Phase I
1995



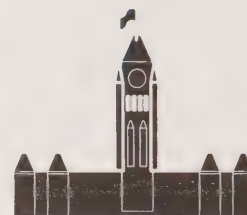
September 1994–July 1995

Interim Audit Objective

To assess whether CIDA is addressing our principal concerns

Two Parts:

- 1) CIDA's self-assessment of actions taken to address the concerns raised in the 1993 Report and Auditor General's comments on whether our principal concerns are being addressed
- 2) Development of a prototype *Bilateral Performance Measurement Model* by CIDA



provided to Parliament
in present 1995 Report

Phase II
1996



September 1995–July 1996

Interim Audit Objective

To assess whether CIDA's renewal is being implemented in the field as planned

Two Parts:

- 1) CIDA-led pilot projects to illustrate application of the *Bilateral Performance Measurement Model* in the field
- 2) CIDA's self-assessment of Phase II results along with Auditor General's comments

to be provided to
Parliament in 1996
Report

Phase III
1997

September 1996–July 1997

Final Audit Objective

To formulate an opinion on the extent to which CIDA's actions have satisfactorily resolved concerns raised in our 1993 Report

Two Parts:

- 1) Auditor General's audit of selected country programs and projects
 - Focus on the measurement of CIDA's results, particularly its projects and the systems and procedures for reporting to the Minister and Parliament
- 2) Auditor General's opinion on the extent to which CIDA's actions have satisfactorily resolved concerns in the 1993 Report

to be provided to
Parliament in 1997
Report

to include operating personnel in Phase II and Phase III of the phased follow-up.

13.36 Our opinion on the extent to which the Agency's actions have satisfactorily resolved the concerns we raised in 1993 will be included in our Report at the end of Phase III. (The three-phased approach to the follow-up is described in the foreword to this chapter.)

13.37 There are three major components to the remainder of this chapter:

- our comments, in summary, on the actions CIDA has reported taking since 1993;
- CIDA's overall self-assessment of its progress; and
- each of the 12 major concerns raised in the Auditor General's 1993 Report, followed by CIDA's report on action it has taken to address them.

Our Comments on Actions Reported by CIDA

13.38 Our review of CIDA's self-assessment has enabled us to comment as follows: **our principal concerns are being addressed at CIDA's headquarters.**

- **The Agency has developed a results-based management concept to strengthen its effectiveness.** This concept is central to the renewal process under way and is being scheduled for implementation in the field. There is a call for a practical approach to implementation and for timely actions by CIDA's employees and development partners. In a time of substantial budget cutbacks, it is more important than ever that CIDA be in a position to demonstrate to Parliament which of its channels and program instruments are yielding the best results in

achieving those objectives that have the highest priority.

- **The first steps toward renewal have been taken.** The steps the Agency has taken to implement the new concept appear to be in the right direction. The clarity with which CIDA has acknowledged its accountability to Parliament for development results and the emphasis it is placing on coherence in pursuing the government's Official Development Assistance priorities are noteworthy. So is the renewed commitment to search for simpler and more cost-effective solutions to program delivery. It is important that the Agency continue to move quickly with its action-oriented program for renewal; the need for conducting exhaustive studies should be questioned periodically. This will minimize the risk of reinforcing the perception that change in government takes forever.

- **The Agency's management renewal effort has so far been largely centred at headquarters; it would be timely to extend the effort to the field level.** The vast majority of CIDA's employees are located in Canada, while the programs and projects it funds are overseas. The primary focus has been on organizing and planning for renewal at headquarters. The emphasis has been mainly on developing a consensus among headquarters management on changes to the Agency's organizational structure, policies, management practices, skills and training requirements. CIDA's Executive viewed these as prerequisites to renewal, because of the cultural change involved in moving from a process-oriented to a results-oriented style of management. An Agency-wide results-based management policy is being prepared. Many of the tools required to implement the policy are in varying stages of development. CIDA's Executive has discussed ways to implement results-based management and the need to develop a reporting system that best supports this initiative. In our

CIDA has acknowledged its accountability to Parliament for development results.

The primary focus has been on organizing and planning for renewal at headquarters.

There is a call for a practical approach to implementation and for timely actions.

The need remains for developing a contracting approach that defines the respective accountabilities and risks of both the executing agents and CIDA.

Insightful analysis of Canada's strengths and how they correspond with developing countries' needs, as well as courageous decisions, will continue to be required to achieve the policy objectives set by the government.

view, CIDA needs a comprehensive tracking and reporting system to assess the quality and status of its projects. Progress in this vital area will be monitored in Phase II of the phased follow-up.

- **The next steps are even more crucial.** There is a need, first, to implement the new policies and practices effectively, particularly in the field; and second, to accelerate the development of indicators that are simple and usable for measuring and reporting on the Agency's results as well as on the success of its programs and, particularly, its projects. These next steps are essential to ensure the credibility of CIDA's renewal.

The impact that the changes under way will have on CIDA's ability to better focus its efforts "on the ground", particularly in those core countries where clearly demonstrated development results can be expected, should provide a measure of the Agency's progress.

- **Factors that impact on CIDA's ability to make rapid progress.** The speed of progress and the extent to which CIDA can strengthen the effectiveness of its programs and projects, as well as its ability to develop systems for reporting to Parliament on their success within the established time frame for renewal, will depend on continuous commitment by leadership at both the political and executive levels. Several other contributing factors include:

- "buy-in" to the new concept of management for results among CIDA's partners in development, particularly its executing agents, given their concern about being held solely accountable to the Agency for development results. Results of development projects are often influenced by factors outside the control of CIDA and executing agents. The need remains for developing a contracting approach that defines the respective

accountabilities and risks of both the executing agents and CIDA. We propose to examine the manner in which the Agency addresses this need.

- ministerial and senior management support for measuring and reporting on the quality of development and other results associated with the Agency's programs and projects. This is particularly important given the risk of adverse publicity that a more open and objective system for performance review and reporting might on occasion entail.

The government has stated in its policy statement *Canada in the World* "that Canadians want to be sure that their aid dollars are being used effectively, that their help is making a difference in the lives of people benefiting from Canadian assistance by increasing their self-reliance."

- the extent to which the Agency is able to deal satisfactorily with the reported perception of conflict between the objective of poverty reduction and the pursuit of the government's commercial and other political objectives, which, in the minds of some parliamentarians and some of the Agency's own staff (unlike corporate CIDA) may not always be compatible. Insightful analysis of Canada's strengths and how they correspond with developing countries' needs, as well as courageous — i.e. clear and consistent — decisions, will continue to be required to achieve the policy objectives set by the government.

- other operating constraints on the Agency's ability to follow through on its implementation plan, given that the above factors are compounded by the impact on morale of resource and staffing cuts, no major change in policies on employee recruitment,

remuneration and rotation, and the risk-averse environment in the public service.

There is an overall concern in the development community in Canada about Canada's ongoing commitment to implementing its stated policy on Official Development Assistance. We were told that this concern arises from a perception that funding ODA has been given lower priority, as reflected in the decline in the ratio of ODA to GNP and the successive budget cuts announced by the government.

In these circumstances, significantly improving the effectiveness of

development co-operation through CIDA's renewal will be a challenge, despite the significant effort that CIDA's employees are willing to make.

13.39 It must be recognized that the actions of departments and agencies are greatly affected by political direction and constraints imposed at the centre on administrative policies. All of these factors have an impact on flexibility, speed of progress and motivation for change. They must be given appropriate consideration when holding management accountable for the ultimate results of its actions.

Audit Team

Manfred Kuhnappel

Rajesh Dayal

Ram Babu Nepal

For further information, please contact Vinod Sahgal, the responsible auditor.

**Canadian International Development Agency's
Self-Assessment Report — Phase I**



Agence canadienne de
développement international

Canadian International
Development Agency

Présidente

President

Hull (Québec)
Canada
K1A 0G4

Hull, Quebec
Canada
K1A 0G4

July 21, 1995

Mr. Denis Desautels
Auditor General of Canada
240 Sparks Street
Ottawa, Ontario
K1A 0G6

Dear Mr. Desautels:

I am pleased to transmit to you, under cover of this letter, the self-assessment report prepared by the Canadian International Development Agency (CIDA). This report is CIDA's contribution to the Follow-through Chapter in your October 1995 Report to Parliament.

CIDA has made substantial progress through the corporate renewal activities it has implemented over the past two years. The results are due to the hard work and commitment of Agency employees and managers, and to the support of our Minister. This self-assessment report provides, in my opinion, a fair and complete assessment of the progress CIDA has achieved in addressing the main concerns raised in your 1993 Report to Parliament. I remain confident that the continuation of renewal over the next two years, will lead to the satisfactory resolution of these main concerns.

I would like to take this opportunity to express my appreciation to you and the members of your team for your encouragement and support. We look forward to continued collaboration and co-operation throughout the next phases of our work together.

Yours sincerely,

Huguette Labelle

CIDA's Overall Self-Assessment of Progress

13.40 In February 1994, CIDA began a major renewal initiative aimed at transforming the Agency into a more results-oriented, focussed, efficient and accountable organization. The initiative is being implemented over three years, from 1994-95 through 1996-97, and will, once completed, bring about major improvements in management and accountability for results, streamlined business practices, transparency and reporting to Parliament, and human resources management.

13.41 The CIDA Renewal Plan responds both to concerns raised by the Auditor General and to CIDA's own strategic management review. Appearing with CIDA before the Public Accounts Committee in May 1994, the Auditor General described the renewal initiative as a "fairly ambitious plan...a good plan". He also stated that he was "very pleased by the commitment of the President and Executive Committee to this plan".

13.42 CIDA has in place a monitoring process by means of which it is periodically assessing progress on the renewal initiative. Corrections and adjustments are being made as required. Progress to date has been significant. Key improvements are described below:

- The government's new foreign policy directions, in particular those relating to development, are being linked to CIDA programming through a new corporate planning process that calls for policy objectives and priorities to be translated into plans, including clearly identified objectives, expected results and performance indicators. CIDA will be in a position to start reporting to Parliament in

the Part III of the 1996-97 Estimates on its achievements in implementing the new foreign policy.

- CIDA is working with the Department of Foreign Affairs and International Trade to not only enhance policy co-ordination but also pursue opportunities for ongoing collaboration. The primary goals are to reduce costs and maintain effective operations, in Canada and abroad.

- To assess and report more completely on aid effectiveness, CIDA has developed and is starting to implement a new performance review policy. The new performance review structure will assist in identifying and communicating lessons learned, thereby aiding in the establishment of a learning culture in CIDA. In addition, a model for assessing and demonstrating the results of development programs is being developed in consultation with the Auditor General and with other international development agencies. The model is expected to be completed by mid-1996. Both of these improvements will help strengthen CIDA's reports to Parliament on results being achieved.

- Important efforts have been made to develop elements of managing for results. There is now much greater awareness in CIDA of the importance of managing for results as a means of achieving and demonstrating aid results. A guide for employees describes the main elements of managing for results; improved project planning and approval processes are more results-oriented; and results-based contracting is being attempted in specific cases. By the end of 1995, CIDA will have developed a clear policy on results-based management to complement its model for development results. This policy will help employees achieve a common understanding of results in the development context and will define responsibilities and accountabilities. In addition, an accountability framework, which also complements the policy on

In February 1994, CIDA began a major renewal initiative aimed at transforming the Agency into a more results-oriented, focussed, efficient and accountable organization.

Progress to date has been significant.

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Over the next two
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field.

results-based management, is nearing completion. This framework sets out clear accountabilities for all staff of the Agency, and clarifies CIDA's role vis-à-vis major stakeholders.

- With a view to becoming more cost-effective, CIDA has streamlined its organizational structure, the processes for planning and approving geographic projects, the processes associated with its contracting regime, and various personnel and administrative processes. It also has strengthened its management function by establishing a broadly mandated Corporate Management Branch and improved its human resources policies, in order to develop, over time, a more skilled, knowledgeable and motivated workforce.

- The Agency has adopted an information management strategy to improve its management and reporting capacity by putting in place an information and technology infrastructure that supports CIDA's business objectives. The first step, implementing hardware, software and training, was completed successfully and the next step, a medium-term information management and technology plan, is under way.

13.43 The initial focus of CIDA's renewal initiative was on management

practices. As described above, CIDA has made good progress in improving its management infrastructure, including its management practices and policies. These improvements, along with important changes to program and project planning, now are starting to manifest themselves in program delivery and field operations.

13.44 Over the next two years, CIDA will concentrate on ensuring that its renewal reforms are translated into program delivery in the field. In implementing the government's new foreign policy, it also will consolidate the gains made in the area of managing for results, including implementing the development results model and better managing risk and performance. This should further improve the cost-effectiveness of its programs and its ability to demonstrate achievements. CIDA recognizes its accountability to Parliament and will continue to improve its reports to Parliament in order to achieve greater transparency.

13.45 The following sections of this chapter provide more details on CIDA's progress on renewal and how it has addressed the concerns raised in the Auditor General's 1993 Report.

CIDA's Report on Its Actions Taken in Response to Concerns Raised in the Auditor General's 1993 Report

Resolving Conflicts among Objectives

Conflicts among objectives need to be resolved (1993 Report, paragraphs 12.31 to 12.39)

In 1987, *Sharing Our Future* became Canada's foreign policy on Official Development Assistance. It reaffirmed earlier strategic policy directions of fighting poverty and promoting self-reliant development. The Agency, in practice, had been tasked with multiple objectives: while charged with pursuing one primary objective, CIDA had others that could often conflict with it.

We were concerned that it was difficult for CIDA to concentrate on putting poverty first and encouraging self-reliance while, at the same time, it had commercial and political objectives that did not always lend themselves to dealing with poverty in a direct way and that encourage external dependency.

We believed that competing or conflicting objectives should be pursued only consciously and in full realization of their effect on the primary objectives.

The new foreign policy clarifies CIDA's objectives

13.46 The objectives of Canada's Official Development Assistance (ODA) program were recently clarified when the government completed its review of

international assistance in the context of its broader review of foreign policy. The approach to ODA set out in *Canada in the World* is noteworthy in a number of respects. It treats ODA as part of an integrated foreign policy. It notes that development assistance makes a unique long-term contribution to Canada's three broad foreign policy objectives of prosperity, security and the furthering of Canadian values and culture. It establishes four key commitments for Canada's ODA program: a clear mandate and set of priorities; strengthened development partnerships; improved effectiveness; and better reporting of results to Canadians. It identifies the actions that must be taken to meet these commitments. It also commits CIDA, Foreign Affairs, and other departments whose work has a bearing on Canada's international relations to co-operate more closely on ensuring greater coherence and consistency in their policies.

13.47 CIDA's mandate is now stated clearly: to support sustainable development in developing countries, in order to reduce poverty and contribute to a more secure, equitable and prosperous world. While the focus of Canadian Official Development Assistance is on meeting the development needs and priorities of developing countries, it is also in the interests of Canadians to contribute to global security, economic growth and prosperity. Canada's security and prosperity are inextricably linked to global conditions and trends. ODA and long-term Canadian interests — including political and trade interests — are not in conflict; they are complementary.

13.48 To achieve its stated purpose, Canadian ODA will concentrate available resources on six program priorities: basic human needs; women in development; infrastructure services; human rights,

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CIDA will develop a tracking system that will enable it to report on funds disbursed on each of the six priorities. It will also monitor progress on all commitments made in the policy and will start reporting to Parliament on the implementation of the policy in the 1996-97 Main Estimates.

democracy, and good governance; private sector development; and the environment.

13.49 With regard to CIDA's priority of private sector development, as stated in the *Government Response to the Recommendations of the Special Joint Parliamentary Committee Reviewing Canadian Foreign Policy*, the government is committed to ensuring the development focus of CIDA activities involving the private sector. Measures to enhance trade in developing countries can exert a strong positive impact on development, and the Canadian private sector is an important development partner for CIDA. The government will work to foster long-term relationships between the private sectors in Canada and developing countries that benefit development, through trade, investment and technology transfer. In this context, CIDA is preparing a detailed policy on private sector development.

Actions to implement the policy

13.50 *Canada in the World* has clarified CIDA's mandate and priorities. To ensure that the new policy is implemented and that programs are fully aligned with the purpose and priorities for Official Development Assistance, CIDA has identified a number of actions required. A plan has been developed detailing lead responsibility and a time frame to meet each of the commitments in the new policy. Examples of actions that will be carried out include the following:

- To help CIDA reflect the new statement of purpose (to support sustainable development in developing countries in order to reduce poverty and contribute to a more secure, equitable and prosperous world), its programming will be guided by the existing sustainable development framework and by the recently approved (June 1995) policy on poverty reduction. This latter policy,

which builds on CIDA's years of experience in this area and on lessons learned by other donors, sets out programming strategies for poverty reduction.

- To provide greater clarity to the six programming priorities, CIDA has developed operational definitions of each priority and a programming direction for each. By April 1996, CIDA also will have developed policy statements for each priority. These two actions will serve to foster coherence by providing CIDA's staff and partners with a clear understanding of the programming priorities.

- CIDA will develop a tracking system that will enable it to report on funds disbursed on each of the six priorities. It will also monitor progress on all commitments made in the policy and will start reporting to Parliament on the implementation of the policy in the 1996-97 Main Estimates.

- CIDA will continue to implement the corporate planning system developed in 1993. Corporate planning will make an important contribution to program coherence and alignment with the new policy. The process will ensure that policy objectives and priorities are translated into branch plans, into regional and country policy frameworks and, finally, into projects and other funded activities. It will also ensure that expected results and performance indicators are defined and that progress made is reviewed.

13.51 Other initiatives under way to strengthen policy coherence include:

- a co-ordinating committee of deputy ministers established recently, chaired by the Deputy Minister of Foreign Affairs and including the President of CIDA and the Deputy Minister for International Trade. It meets regularly to oversee systematic policy co-ordination between the two organizations; and

- a new process for regional and/or country reviews (see paragraphs 13.56 to

13.61). With this process, as country or regional policies are reviewed, CIDA and Foreign Affairs will work toward developing strategies that take into account and incorporate all relevant foreign policy instruments.

13.52 The application of a new performance review policy will support the effective implementation of the new aid policy (see paragraphs 13.74 to 13.80). Over the next three years, CIDA plans to undertake Agency-wide examinations of each of the six program priorities set out in the policy. This will allow it to go beyond reporting on disbursements to reporting, where feasible, on the results achieved in priority areas through all delivery channels.

Concentration of Efforts

CIDA needed to concentrate its efforts (1993 Report, paragraphs 12.40 to 12.46)

CIDA would have benefited from concentrating on its primary objectives and priorities and reducing the dispersion of its programs. It needed to be more selective, by focussing on key countries and more productive activities where there was the greatest potential for benefit in terms of development.

CIDA needed a clear and specific strategy for each country, focussed on the Agency's primary objectives. At stake was the quality of CIDA's programs and projects in relation to its mandate.

The new foreign policy - a focus on priorities and countries

13.53 With regard to geographic concentration, as stated in the *Government Response to the Recommendations of the*

Special Joint Parliamentary Committee Reviewing Canadian Foreign Policy, Canada does have important interests in all areas of the world. Efforts will be focussed on a limited number of countries, while maintaining programs in other countries through low-cost, administratively simple delivery mechanisms. *Canada in the World* signals that available resources will be concentrated on the six program priorities: basic human needs; women in development; infrastructure services; human rights, democracy, and good governance; private sector development; and the environment. In addition, 25 percent of Official Development Assistance will be committed to basic human needs. This is an important step in confirming the strategic focus of the Agency's programs.

Aligning CIDA's programs with the priorities and ensuring effective implementation of the policy

13.54 As described already, CIDA has developed mechanisms to align its programs with the six priorities and to implement the new policy. It is defining and describing clearly each of the priorities, developing a tracking system, and continuing the implementation of the corporate planning system and the new regional or country development policy framework (R/CDPF) process. It is evaluating the results of each program priority and reporting on the new policy to Parliament. Paragraphs 13.50 to 13.52 provide more information on CIDA's actions in this regard.

13.55 CIDA's approach for developing country or regional strategies that are focussed on the Agency's priorities is described in paragraphs 13.56 to 13.61.

**Twenty-five percent of
Official Development
Assistance will be
committed to basic
human needs.**

A Better Focus on Results

A better focus on what results realistically can be expected in each country (1993 Report, paragraphs 12.72 to 12.79)

Problems in different countries and regions call for different strategies. The concern was that there was a gap between CIDA's broad policy framework for a country and its projects in that country. To bridge the gap we suggested that a country-specific strategy linked to an operating plan would enable CIDA to focus on specific and measurable results, country by country. It would also allow CIDA to discuss its operations in a more practical way with its partners and host country officials.

Important changes in CIDA's processes

13.56 CIDA agrees that different countries and regions call for different development strategies. With this in mind, in June 1994 it adopted a new country/regional analysis process that brought about important changes:

- The regional or country development policy framework (R/CDPF) was reaffirmed as a corporate document, conceived with the full involvement of all program branches. It is applied differently to CIDA's different channels. While it enables the Agency to lay the groundwork for geographic branch funding decisions, it guides all Agency programming and identifies opportunities for complementarity with other programs.
- The consultation process has been greatly strengthened. In-depth consultations are now held with Canadian stakeholders, other donor agencies and the country or region involved.
- For each policy framework CIDA will state as clearly as possible the

specific objectives and expected results, country by country or region by region, depending on the nature of the program. As well, clear and realistic expected results and performance indicators will be identified for project interventions supporting each regional or country development policy framework.

- CIDA is committed to developing the tools to evaluate the effectiveness of the ensemble of project interventions in the context of country and regional programs. While recognizing that there are multiple factors and intervenors that influence development at a country, region or program level, CIDA also will test the feasibility and reliability of demonstrating results at these levels of aggregation.

13.57 This improved planning process fosters the closest coherence possible between corporate priorities and country/regional objectives and expected results of projects. It is based on analysis of the needs and development problems of a country or region, its prospects for sustainable development, the Canadian comparative advantage and capabilities, the role of other donors, and the various risks inherent to CIDA programming in the country or region. For all major countries or regions, CIDA will develop a regional or country development policy framework over the next five years. Since the introduction of the process, in June 1994, CIDA has completed the policy framework for three countries: China, Vietnam and the Philippines. Another country and four regions will be reviewed within the next year. It also should be noted that CIDA is developing, for the end of 1995, a set of detailed guidelines for preparing regional and country development policy frameworks as part of a handbook to help analysts undertake the required analyses.

13.58 As illustrated by the recently completed country development policy frameworks, CIDA has conducted

This improved planning process fosters the closest coherence possible between corporate priorities and country/regional objectives and expected results of projects.

analyses of each country, including the rationale for Official Development Assistance to these countries, lessons learned, risks, and the mutual interests of the recipient countries and Canada. Policy options have been developed and assessed. CIDA conducted in-depth consultations in the recipient countries, with Canadian stakeholders and with other donors throughout the process. Through annual consultations or, in the case of China, a visit by the Minister of Foreign Affairs, CIDA ensured that the recipient countries were in agreement with the final analysis. The policy frameworks also were widely distributed to partners and stakeholders (i.e. Canadian private sector firms, educational institutions and associations, non-governmental organizations, and professional associations) to ensure their understanding of the direction of Canada's program in these countries and to generate thinking about how they could contribute to the expected results.

13.59 In regard to Canada's influence with recipient governments, CIDA believes that there are a number of factors that work in its favour. The fact that Canada acts with the best interests of the recipient countries in mind, and is not seen to be driven by narrow self-interest, is important. So is the fact that CIDA is a well-respected organization. The Auditor General has stated that "CIDA in the field has a reputation for integrity and co-operation." Canada can also set an example for democracy and good governance, and has expertise to offer in many areas of development assistance.

Bridging the gap between new programs and projects

13.60 As CIDA has noted, the policy framework for each major country or region will now describe program goals

and objectives, priority areas, and expected results. CIDA also will identify realistic results and performance indicators for project interventions. To provide managers with the tools they need, CIDA is working, in collaboration with the Auditor General, on developing a model/methodology for evaluating and demonstrating results (see paragraphs 13.66 to 13.68). Several instruments to help managers assess effectiveness will emerge from the methodology:

- the R/CDPF investment appraisal guide will help managers determine the choice of programming priority for the region/country and the area of thematic focus within the selected programming priorities; and
- the project investment appraisal guide will help managers determine the choice of projects within the selected areas of thematic focus/programming priorities, and will help them assess project performance.

13.61 The coherence between new projects and programs also is being strengthened through recent changes to the planning and approval process for bilateral projects (see paragraphs 13.88 and 13.89). As a first step to planning a new project, CIDA must now demonstrate the project's link to corporate policies and priorities and to the country policy framework. The expected benefits from the project also will be defined. Recent projects being planned in China and Vietnam demonstrate that the coherence between new projects and the country analysis is clearly established. Recognizing the close links among CIDA's branch plans, the R/CDPFs and project interventions, and to ensure that the planning process is not burdensome, CIDA has decided not to pursue an operating plan at this time.

As a first step to planning a new project, CIDA must now demonstrate the project's link to corporate policies and priorities and to the country policy framework.

Promoting Enduring Benefits

Promoting enduring benefits through more self-reliant development (1993 Report, paragraphs 12.80 to 12.89)

Development requires that, after the termination of aid funding, something of value be left behind that can be sustained. We believed that project sustainability needed to be considered in all forms of appraisal. This is as critical to the quality of the investments CIDA makes as technical feasibility and project design. We also suggested that monitoring certain indicators of project self-sustainability at appropriate milestones could provide an early warning system, to help managers identify and correct problems related to sustainability before they became unmanageable.

Another concern raised was that CIDA had placed too little emphasis on the clarity of objectives in contractual arrangements including project sustainability and continuation of benefits after it has withdrawn - and too much on the details associated with completing a specified set of activities in compliance with technical requirements during the assistance phase.

CIDA's efforts to enhance project sustainability

13.62 As stated in *Canada in the World*, an effective development assistance program begins with the recognition that development is a complex process and that many conditions must be met before it takes permanent root. The growing diversity of the development world adds to this complexity and it is clear that development assistance is just one part of a larger effort — one that involves the resources of developing countries themselves and other factors, such as international trade and investment.

13.63 Recognizing these conditions, project sustainability can be enhanced by a number of factors. CIDA can analyze whether the host country has an appropriate policy and institutional environment, plan over a long-term horizon, and ensure the participation and ownership of the host country. It can assess the availability of sustaining resources to operate and maintain the project over its life cycle, assess the technical and managerial capability or readiness of the host country to sustain the project, and build human, institutional and technological capacity. CIDA can manage risks and manage for results. It can also evaluate results and apply lessons learned from experience. CIDA is devoting extensive effort to developing policies, practices, tools and a management philosophy that reflect a commitment to managing for results (see paragraph 13.42) and that address key factors for project sustainability. Some of these efforts are described in the following paragraphs.

New approach, processes and methods

13.64 Key elements of CIDA's new approach to country or regional analysis (see paragraphs 13.56 to 13.61) that support sustainability include an assessment of the needs and problems of the developing country or region; an examination of major political or economic changes in the country or region; an analysis of the prospects for development, of the role of other donors, and of the Canadian comparative advantages and capabilities; and in-depth consultations with recipient countries, Canadian stakeholders and other donors.

13.65 CIDA also has adopted new processes for planning and approving projects (see paragraphs 13.88 and 13.89). Key elements of the new processes that support sustainability include the identification of analyses that are required

CIDA is devoting extensive effort to developing policies, practices, tools and a management philosophy that reflect a commitment to managing for results and that address key factors for project sustainability.

during project planning, and new criteria for project appraisal. Analyses to be conducted during project planning, depending on the nature and type of project include a technical feasibility analysis; an institutional and management assessment; a gender role analysis; a financial assessment; economic assessments; an environmental impact analysis; and a political risk analysis. Project appraisal criteria include an assessment of whether the project: clearly defines objectives, expected results, the potential for sustainability, and possible adverse effects; reflects lessons learned; identifies constraints and develops a risk management strategy to prepare for possible negative events; and proposes an approach appropriate to the nature and risk of the project.

13.66 CIDA currently is developing a performance review methodology to demonstrate the results of its bilateral programs and projects. This methodology will lead to establishing indicators of self-sustainability. It will describe key questions, indicators, and the performance analysis methodology that should be applied at key steps in program and project management. The data generated by applying this methodology will serve as an early warning system for projects and programs that are not leading to the expected results, and the information will be used to correct the course of activity as needed. Managers also will use the methodology to answer questions such as why a particular program or project should be chosen over others; how results should be defined; how operational effectiveness should be measured; and how risk should be assessed and managed. CIDA will develop several analytical instruments, including guides for each major step in the new process for planning and approving programs and projects (see paragraph 13.60). These guides have been

set out in a comprehensive and integrated model of performance review instruments that, for the first time, showed clearly the relationship between self-assessment of performance by CIDA's branches and corporate-level performance review.

13.67 The methodology is being developed in consultation with managers throughout the Agency, with the Office of the Auditor General, and with other donors. A prototype of the model was produced in June 1995 and will be tested through pilot studies in 1996. It is expected that the model will be discussed in the Auditor General's November 1996 Report. Following are some of the lessons learned to date from our consultations with other donor agencies:

- All donor agencies we visited, including the World Bank, Inter-American Development Bank, USAID, UNICEF, and UNDP, are struggling with the challenge of collecting, in a cost-effective manner, relevant and appropriate data that they can analyze for the purpose of reporting on their performance. It should be noted that the Office of the Auditor General, at a recent appearance before the Standing Committee on Foreign Affairs and International Trade, acknowledged the difficulty of assessing aid results.
- The indicators must be appropriate to the program's context. For example, USAID pointed out that the rate of acceptance for family planning in Africa is historically lower than in Asia. The interpretation of indicators must take into account the program context.
- Although all donors are interested in and recognize its importance, none has yet been able to develop a methodology to evaluate its impact in such "non-project" areas as policy dialogue.
- The issue of how to evaluate results in the new programming context of flexible, iterative projects is a challenge to all donors. Also a challenge is the

All donor agencies are struggling with the challenge of collecting, in a cost-effective manner, relevant and appropriate data that they can analyze for the purpose of reporting on their performance.

requirement to evaluate results in new areas of Official Development Assistance aimed less at building structures and more at transforming society (e.g. democratization).

- A significant period of time is needed to develop appropriate and useful indicators. It was suggested that four to five years are required to devise a solid, field-tested set of indicators for a specific sector.

- A significant period of time (five to seven years) also is required to develop fully and integrate a performance review system.

- The integration of a performance review system into an organization can take place only where its staff has participated fully in developing and experimenting with the new system.

13.68 As part of the consultation process, CIDA, the Office of the Auditor General and the International Development Research Centre will co-operate to organize a seminar on the measurement of development results. Representatives from national audit offices and evaluation offices of other donor agencies will be invited. CIDA will present its methodology for demonstrating the results of bilateral programs and projects, and best practices in this field will be discussed. It is expected that this seminar will be held in 1996.

13.69 The Auditor General's concern about clarity in contractual arrangements is dealt with in paragraphs 13.81 to 13.84.

Improving Risk Management

Improvements needed in the way CIDA manages its operating risks (1993 Report, paragraphs 12.90 to 12.96)

We were concerned that factors, whether qualitative or quantitative, that could eventually impact on the Agency's ability to achieve the results it expects needed to be more rigorously assessed, before funding was approved and at appropriate subsequent milestones. Management of risk was required at both the country and the project level. We suggested that:

- First, CIDA needed to examine thoroughly the capacity of the recipient country and its main public institutions to absorb development assistance effectively.

- Second, there must be testing by CIDA of the assumptions it makes to support the recipient country's commitment, and increased participation of the targeted beneficiaries in the identification and preparation stages of the project.

- Third, the quality of risk assessment at the project level needed to be improved. CIDA's project management approach needed to be tailored to the type of project being undertaken and to the host country's institutional capabilities.

We also concluded that CIDA needed an early warning system to provide explicit data periodically up the line on what projects are in difficulty, and why. Solutions for alleviating difficulties could then be explored more explicitly.

CIDA is promoting assessment and management of risk

13.70 CIDA is developing approaches to promote risk assessment and management at all levels in the Agency:

The integration of a performance review system into an organization can take place only where its staff has participated fully in developing and experimenting with the new system.

- With the adoption of new project management practices (see paragraphs 13.88 and 13.89), CIDA is introducing to its planning of new projects a number of analyses, including assessments of risk and of the potential for ongoing project viability. It also is developing the use of a risk management strategy tailored to the specific project. Project managers also will be expected to monitor, on an ongoing basis, whether anticipated risks are actually occurring and whether conditions that are critical to the success of projects are still present, and to use this information to adjust project activities to ensure the achievement of expected results.

- With the adoption of a new process of regional or country development policy frameworks (R/CDPF) (see paragraphs 13.56 to 13.58), CIDA will, in consultation with the recipient country or region, assess the development context of the country or region, including its capacity to absorb aid. The recently completed CDPFs illustrate that CIDA has examined for each country the economic situation, level of poverty and social policies, governance and political sustainability, the role of women in development, environmental issues, and other donor activities involved. These are all elements that help CIDA assess the country's absorptive capacity, assess the risks involved, and develop an appropriate strategy for Canada's development assistance in the country.

- In regard to an early warning system, the performance assessment methodology/model that is being developed (see paragraphs 13.66 to 13.68) will provide managers with the tools they need to identify and report on projects and programs that are not achieving expected results, and to use the information collected to change the course of activities.

- Another critical element of CIDA's risk management strategy is the adoption of the new performance review policy (see

paragraphs 13.74 to 13.80). Of particular importance is the new approach to planning review activities, which ensures that programming and management areas with the highest priority are examined first. For example, each of the six program priorities will be examined within the next three years.

Institutionalizing Lessons Learned

Institutionalizing lessons learned (1993 Report, paragraphs 12.97 to 12.101)

Generally, learning organizations display four important characteristics: an organizational culture that stresses learning, places value on it, encourages it and rewards it; an institutionalized but simple and clearly understood mechanism that allows lessons learned to be captured and accessed; an environment that actively encourages learning by doing; and finally, a requirement and a responsibility to use lessons learned as part of the normal management process.

Our concern was that the Agency did not have an organizational "learning culture". Lessons learned were not incorporated in a systematic and timely way into operations. CIDA needed to institutionalize lessons learned at the project and country levels.

CIDA's steps to strengthen its learning culture

13.71 CIDA's new performance review policy (see paragraphs 13.74 to 13.80) is one of the Agency's building blocks in strengthening its organizational learning culture:

- The new policy makes it clear that all managers are accountable for monitoring performance, demonstrating results and using lessons learned, as part of the normal management process.

CIDA is introducing to its planning of new projects a number of analyses, including assessments of risk and of the potential for ongoing project viability.

The new (performance review) policy makes it clear that all managers are accountable for monitoring performance, demonstrating results and using lessons learned, as part of the normal management process.

CIDA is working to maintain its corporate memory capacity, which collects and can disseminate in various forms recommendations and lessons learned from previous sector, program and project evaluations.

- An integrated system of performance assessment and results aggregation is being designed for the Agency's consideration. It is intended to produce information on results and lessons learned that can be easily accessed within CIDA and by its partners. CIDA will draw on project evaluations, end-of-project reports and institutional assessments as well as on corporate performance reviews to provide thematic syntheses of results and lessons learned. Lessons learned (including those from the field) will be captured and shared within CIDA and with partners, recipient countries and the Canadian public through various mechanisms, including an annual review of results, newsletters and thematic journals.

- CIDA will prepare synthesis reports on audits and evaluations of significant issues so that conclusions can be shared among its staff and with partners. This will enhance knowledge about development and about cost-effective management practices.

13.72 An innovative evaluation in which CIDA adopted a more participative approach to conducting the study and sharing its results was the recently completed evaluation of its Women in Development (WID) policy. The study broke new ground in evaluating the effects of a policy rather than of a project or program, something that few departments of the Government of Canada have attempted. This approach is increasingly important as development assistance agencies turn from capital projects to policy dialogue and institutional development activities that are crucial in the developing world. The evaluation included case studies in six countries, which were selected to give the research team a wide exposure to CIDA's Women in Development activities in a variety of cultural and economic contexts. Two countries were selected in the Americas, two in Africa and two in Asia. The CIDA

evaluation team held focus group discussions and meetings with the recipient governments, local institutions and other donor agencies, as well as with local women's organizations involved in development projects. The final report was widely discussed and distributed within the donor community and the participating recipient countries.

13.73 Other key elements of CIDA's approach to maintaining and continuing to build an organizational learning culture include:

- maintaining CIDA's corporate memory capacity, which has existed since 1984 and which collects and can disseminate in various forms (for example, by sector or by country) recommendations and lessons learned from previous sector, program and project evaluations;

- continuing to manage a database listing the evaluations and related studies completed by members of the Expert Group on Aid Evaluation - Development Assistance Committee (DAC) of the Organization for Economic Co-operation and Development (OECD). It should be noted that CIDA, on behalf of the DAC, keeps this database, which is accessible to all members and is a great resource for donors' evaluators and researchers;

- adopting new project planning processes (see paragraphs 13.88 and 13.89) which require as one of the first steps to planning new projects that the project manager examine relevant lessons learned in the sector of activity and country or region concerned;

- adopting a new Human Resources Management Strategy for 1995-1998, which includes a review of CIDA's core competencies to ensure that they encompass the collective learning and skills needed by the Agency in the future. The strategy also includes shifting training and development efforts to the acquisition of needed competencies and developing a

recruitment strategy in keeping with the needs of the Agency;

- continuing to develop its information management infrastructure and systems to allow headquarters and field employees to communicate effectively among themselves as well as with partners and other government departments; and
- demonstrating a clear preference for using and building CIDA's internal skills and capacity, while contracting out only for timely and highly specialized expertise.

Upgrading Audit and Evaluation

Upgrading CIDA's internal audit and project evaluations (1993 Report, paragraphs 12.102 to 12.110)

Internal audit and evaluation of development projects can play a critical role in ensuring the credibility of aid agencies, legitimizing development assistance to various constituencies, and improving the performance of the Agency.

- We concluded that the Agency could improve the value of its audit work and the significance of its audit findings by adopting a more selective approach.
- Most project evaluations were not focussed on the potential of the project to become self-sustainable.
- The ability to monitor and evaluate the potential for results more selectively, so that changes in the environment were discerned and activities suitably adapted, needed to be strengthened if evaluations were to contribute to CIDA's strategic management capacity.
- Results of audits and evaluations were not widely shared with others, for example, recipient governments and other partners involved in development projects.

CIDA's new Performance Review Policy will upgrade audit and evaluation

13.74 CIDA has developed a new Performance Review Policy in consultation with Treasury Board and the Office of the Auditor General. This new policy will help CIDA better demonstrate and report on aid effectiveness and management performance. It sets out a framework for performance review that defines the types of reviews and their purpose, corporate and branch accountabilities for review, and how the information produced by the reviews will be used. The new policy states clearly that all managers are accountable for demonstrating results and monitoring performance. The policy also calls for the Performance Review Committee (CIDA's Executive Committee, with observers from the Office of the Auditor General and the Treasury Board Secretariat) to meet annually to approve the performance review work plan, consisting of corporate-level audits and evaluations.

13.75 CIDA now will be using three major types of reviews: corporate internal audit; corporate program evaluation; and branch assessment of performance. These will be integrated as much as possible to maximize coherence, efficiency and learning. CIDA also will systematically collect and analyze performance review information to assess development effectiveness, identify lessons learned, and report on aid effectiveness. A strategy and a three-year performance review plan were established in March 1995 to develop the major review instruments and complete reviews of high-priority program and management areas. The Agency is taking steps to enhance its capacity for better evaluations and audits. Staff resources for performance assessment in the program branches are being developed, and audit and evaluation functions in the Performance Review

The Agency is taking steps to enhance its capacity for better evaluations and audits.

Division are being upgraded. A critical first step in implementing the plan will be to complete the staffing of corporate and branch performance review functions by the end of 1995.

13.76 The performance review plan focusses on the six programming priorities outlined in *Canada in the World*. These new reviews are now scheduled over the next three years so, for the first time, CIDA will have comprehensive coverage of its main priorities in a reasonable period of time. Women in Development and Gender Equity will be reviewed first, because some work has already been completed (see paragraph 13.72) and because the review will coincide with the Fourth Conference on Women, to be held in Beijing in September 1995. Basic Human Needs and Infrastructure Services were selected for reporting in the fall of 1996 because of the high interest expressed by Parliament and the public in general. Private Sector Development will be reviewed later in 1996, Environment in 1997, and Democratization and Good Governance in 1998, to allow time for CIDA's operational experience in these areas to mature before performance is reviewed. The reviews will address issues of relevance, sustainability, development results and costs, as well as management effectiveness, efficiency and economy. They will also address the relative effectiveness of the main channels of aid, lead to an overall synthesis of findings and an action plan, and contribute to policy development and reporting to Parliament.

13.77 The performance review plan also sets out an ambitious agenda of new methodology development, to produce instruments and approaches to support the reviews and to provide branch managers

with the tools they need to assess the performance of their programs and projects toward achievement of expected results. Over 1995 and 1996, new instruments will be developed. (Paragraphs 13.66 and 13.67 describe progress in this area.)

13.78 Another improvement to be made as a result of the new performance review policy is that internal audit will no longer concentrate on administrative and project management procedures, but will examine issues most significant to the Agency, such as the implementation of new systems and procedures. There also will be audit follow-ups and sharing of audit results, to ensure that internal audits are used to guide future activities and to highlight and disseminate lessons on what management practices work and do not work.

13.79 CIDA recently has taken other measures to give internal audit and evaluation greater importance as management functions. In June 1995, the Executive Committee agreed to meet quarterly to review progress on corporate audits and evaluations. This will allow the committee to be aware of important issues emerging from audits and evaluations that may require discussion and quick executive action. In addition, the new Director of Internal Audit will submit a plan to the Executive Committee recommending a new organizational structure for audit that will ensure adequacy of coverage and strategic use of resources.

13.80 CIDA's approach for sharing lessons learned from its reviews is described in paragraph 13.71 and 13.72.

Clarifying Accountability

Accountability needed to be clarified (1993 Report, paragraphs 12.56 to 12.68)

We were concerned that, until recently, CIDA had not fully acknowledged its accountability to Parliament for managing in a way that would produce desired results - that is, for obtaining value for money - and felt strongly that CIDA's accountability with respect to managing for results needed to be clarified.

We felt that CIDA needed to arrive at clearer understandings with recipient governments about what specific objectives can be realistically pursued and on the division of accountability for achieving them.

Our main concern was that CIDA had not focussed on the results that were to be achieved or that have been achieved.

CIDA's steps toward clearer accountabilities

13.81 CIDA recognizes its accountability for achieving and reporting on results. Its President has stated this clearly at various parliamentary committee meetings. With regard to internal clarification of accountability, CIDA has developed a corporate accountability framework to describe how branches share the accountability for planning, managing and reporting on the implementation of the Official Development Assistance policy, and for ensuring good relations with Parliament, other departments and stakeholders. CIDA plans to complement this with a policy on results-based management that will clarify accountabilities in this area (see paragraph 13.42), and with an expanded corporate accountability framework to

ensure a common understanding of functional and managerial areas of accountability. Branch frameworks also will be developed. As well, CIDA has made improvements in reporting to increase transparency, thereby reinforcing its accountability (see paragraphs 13.94 to 13.96).

13.82 With regard to the clarification of accountability between CIDA and its partners (suppliers of goods and services), the Agency started work on the concept of results-based contracting by producing a draft framework in the summer of 1994. It also has undertaken some early experiments involving contracts, which apply the results-based management philosophy. CIDA recognizes that results-based contracting is key to the success of managing for results, and is committed to continuing work in this area. Over the next year, it will continue to develop results-based contracting as part of its work on the new results-based management policy, along with other business re-engineering efforts (see paragraphs 13.85 and 13.87).

13.83 Progress in results-based contracting has been limited. However, CIDA considers that it would be counterproductive to introduce results-based contracting unilaterally without involving its partners and before it has made more progress in results-based management. As discussed in paragraphs 13.66 to 13.68, evaluating the results of aid is very complex and all donor agencies are struggling to find simple and cost-effective ways to do this. CIDA believes that its work on developing a methodology to evaluate the results of bilateral programs and projects will help it arrive at a common understanding with its partners about results-based management and contracting. In the meantime, CIDA is co-operating with both the profit and the

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not-for-profit sectors to develop an approach that is satisfactory to all parties concerned. Several consultation groups have been formed to discuss and generate solutions and consensus on major areas of concern, including:

- finding ways to account for the risk that CIDA's partners encounter if the recipient country does not, for whatever reason, deliver on its commitments in a timely manner;
- ensuring a mutual agreement and understanding on results, performance indicators and the collection of data, including baseline data; and
- ensuring a common understanding on how results should be measured.

13.84 As for improving its agreements with recipient countries, CIDA's new process for developing regional and country policy frameworks calls for strengthening its consultations with recipient countries throughout the process (see paragraphs 13.56 to 13.61). This will help ensure a common understanding between CIDA and the recipient country.

Streamlining the Way CIDA Runs Its Business

There was a need for CIDA to streamline the way it runs its business, including its existing controls, to be more efficient and effective. (1993 Report, paragraphs 12.47 to 12.52)

We were of the view that CIDA needed a new control structure for the Agency and that it needed to simplify its management process and make individual staff more answerable for managing for results.

A long-term commitment by a stable CIDA management team with particular knowledge in the project area was rare. An approach that linked

staff assignment lengths with valuable results was needed. At stake was the Agency's ability to manage efficiently and effectively.

CIDA has made changes to streamline its business processes

13.85 Over the last year, CIDA has conducted a number of re-engineering studies to streamline internal processes so that they will become more cost-effective and focussed on results. Business processes that have been streamlined include planning and approval of bilateral programs and projects, CIDA's contracting regime, and management and personnel support service functions. Reforms to the new process for country or regional programming and the new project planning and approval processes are described elsewhere. Key elements of changes made to date in contracting are the elimination of CIDA's in-house inventory of consultants and the use of the Open Bidding System to advertise contracting opportunities. The new system is market-driven, less costly, more transparent, and intended to improve competitiveness. More changes are being made to reduce delivery time and adopt results-based contracting (see paragraphs 13.82 and 13.83). Agency management and personnel support services are now being modified to become more cost-effective and client-driven. As well, CIDA is improving its information management to get the right information at the right time and be in a position to report well (see paragraph 13.42).

13.86 It is too early to assess the impact of the changes on the cost-effectiveness of delivering its aid program, but CIDA anticipates significant savings. For example, the costs of Agency support services will be reduced over the next three years. CIDA will continue its

streamlining efforts by re-engineering processes that have not yet been reviewed and by developing an approach for continuous streamlining.

13.87 CIDA is a centralized organization. Its projects are implemented by executing agencies or non-governmental organizations in the field. The CIDA project management team comprises primarily headquarters personnel, with the active participation of CIDA field representatives whenever possible. Project management positions at CIDA headquarters must be held for a minimum of three years, and are held on average for approximately four years. The recommended duration for CIDA field assignments is two or three years, depending on the level of hardship of the post. For 1993 and 1994, the average duration of CIDA postings was approximately three years. A particular challenge here is optimizing the cost-effectiveness of the duration of an assignment abroad against the now fewer opportunities to offer employees this essential field experience. As well, there is the ongoing presence of project personnel contracted by the executing agency. All of these factors contribute to the continuity and stability of project management.

Revising CIDA's Approach to Project Management

More innovative project management skills and practices were needed (1993 Report, paragraphs 12.53 to 12.55)

We were concerned that CIDA's approach to project management needed to be revised. Its engineering "blueprint" for funding, staffing and managing activities could not be applied in a mechanical way to many

of the newer types of projects that were much "softer" in nature, where results could be demonstrated only over a longer period of time. CIDA's growing involvement in a wide range of projects required that CIDA's staff maintain traditional project management skills while systematically developing the mindset, knowledge and skills necessary for the new types of projects. CIDA needed to develop the capacity to deal with the new kind of risk and uncertainty without abandoning traditional project management disciplines. At stake was the Agency's ability to achieve results.

New approaches to CIDA's project management

13.88 CIDA has re-engineered its processes for bilateral program and project planning and approval with the objective of making them faster, simpler, cheaper and more effective. The redesign of the contracting process also will contribute to reduced delivery time and increased efficiency and effectiveness. Following are the major components of the new processes:

- A new approach to country or regional programming has been adopted. The new country or regional policy frameworks will describe the objectives and expected results for each program, the risks involved, and a framework for monitoring and evaluating progress toward achieving results. More information and examples on country and regional programming are provided in paragraphs 13.56 to 13.61.
- Criteria to appraise proposed projects have been defined. CIDA will now assess every new project to determine whether it: reflects ODA priorities and policy and program objectives; clearly defines objectives, expected results, the potential for sustainability, and possible adverse effects; reflects lessons learned; and

CIDA has re-engineered its processes for bilateral program and project planning and approval with the objective of making them faster, simpler, cheaper and more effective.

clearly defines both the expected risks and a risk management strategy.

- Seven business lines were introduced to replace the previous single model for bilateral projects and to allow for different planning and approval processes, depending on the type of project. Examples of new lines of business include the quick transfer mechanism for small and time sensitive projects; the blueprint model for complex projects that are fully planned prior to implementation (such as infrastructure-related projects); the iterative model for complex and integrated projects that require significant planning and analysis throughout the life of the project; and the local initiatives model for projects that are developed in the field.

- An analytical framework has been defined for each line of business. The framework identifies the type and characteristics of the analysis that normally would be carried out as part of project planning activities. The nature and extent of the analysis is dependent on the size, complexity and type of project and may include technical feasibility analysis, socio-cultural and gender analysis, environmental analysis, economic analysis, institutional and management analyses, risk analysis and an analysis of the expected benefits to Canada and the recipient country.

- CIDA is reviewing field delivery services and has developed a plan of action to improve their cost-effectiveness. The roles and responsibilities and a common management framework were defined for CIDA program support units (PSUs) in the field. A common accounting system for cost recovery also was developed and is being tested through a pilot project in six PSUs. CIDA is presently working with the Department of Foreign Affairs and International Trade to review the size of the human resource base in field operations. A Treasury Board constraint that discouraged the posting of

CIDA personnel in PSUs was removed recently.

13.89 CIDA's experience with these new approaches is still very limited. However, through monitoring of renewal, CIDA has identified problems that could have an adverse impact on the anticipated savings. For example, it found that not all managers are comfortable with the new processes and that they tend to rely on previous, well-understood methods to verify documents. To respond to their concerns, CIDA will take a number of actions. By December 1995, it will provide targeted training and coaching on the new approaches; develop a challenge function to encourage ongoing renewal, i.e. continual challenging of existing and new approaches; and develop a vehicle for feedback and learning about their application.

Better Internal Control over Contributions Involving Counterpart Funds

Better internal control over contributions involving counterpart funds (1993 Report, paragraphs 12.111 to 12.114)

We were concerned that CIDA did not have adequate assurance that all moneys had been spent for the intended purposes and had been accounted for fully.

Review completed, pilot under way, and audit by CIDA scheduled

13.90 Since the Auditor General's 1993 audit, CIDA has completed a review of counterpart funds that led to the publication in June 1994 of new directives on counterpart funds. The new directives define the accountabilities and responsibilities of CIDA and the host country for managing counterpart funds,

CIDA has completed a review of counterpart funds that led to the publication of new directives in June 1994.

and establish guidelines for their efficient and effective management. CIDA also has been working with the Office of the Auditor General on a pilot project in Bangladesh to examine the use of a supreme audit institution to audit counterpart funds. As stated in paragraph 13.63, project sustainability is enhanced when the participation and commitment of the host country during project planning is encouraged. The pilot project in Bangladesh serves as an example of the new participative approach. The project was designed co-operatively by CIDA, the Office of the Auditor General, the Government of Bangladesh, and the Comptroller and Auditor General of Bangladesh. The first pilot audit report from the Comptroller and Auditor General of Bangladesh is expected in January 1996. Lessons learned from this pilot project will be used in planning future initiatives.

13.91 In addition, as part of its decision to review issues that are most significant to the Agency (see paragraph 13.78), CIDA will conduct an audit of counterpart funds in 1996. The audit will examine CIDA's practices and controls in accounting for and reporting on the use of counterpart funds to ensure that funds are spent for intended purposes.

CIDA Transparency

CIDA needed to be more transparent about what it was trying to achieve and how well it was doing (1993 Report, paragraphs 12.64 to 12.68)

We felt that CIDA needed to be more forthcoming with full and frank information to the public in Canada and the recipient countries on what it was trying to achieve and how well it was doing. When multiple objectives were pursued, parliamentarians needed to be informed about the relative

significance of the objectives and how they impacted on the overall outcomes or results to be achieved. Reporting to Parliament should focus less on inputs and more on accomplishments and lessons learned. CIDA's policies, plans and the extent of its accomplishments should be open to anyone with a legitimate interest.

Transparency with partners, stakeholders and recipient countries

13.92 CIDA has started to make improvements in its practices for consulting with stakeholders and informing the public. A consultation strategy to improve relations with stakeholders was put in place in 1993. CIDA also instituted a spokesperson policy in 1994 to broaden its communications with the media and the general public. In 1994–95, it conducted over 30 official consultations of different types. For example, program staff consulted with Canadian stakeholders and partners in developing new country program strategies; CIDA met with the supplier community to discuss changes to its contracting regime (see paragraph 13.83); and held a number of annual consultations with Canadian non-governmental organizations. To improve its transparency with recipient countries, CIDA introduced a greatly improved consultative process for the preparation of regional or country development policy frameworks (see paragraphs 13.56 to 13.61). CIDA's approach for sharing lessons learned with its partners, stakeholders and recipient countries is described in paragraphs 13.71 to 13.73.

13.93 Although progress has been made, CIDA recognizes that more work is needed to develop employee awareness and understanding of the nature and importance of relations with stakeholders

A consultation strategy to improve relations with stakeholders was put in place in 1993.

In future years, improved performance review information will strengthen further CIDA's ability to report to Parliament on results being achieved.

**CIDA is improving its
reports to Parliament
to increase their focus
on objectives and
achievement of
results.**

and the public. The next steps in this area will include promoting and reinforcing the importance of high-quality service, and continued training and coaching on consultations and stakeholder relations.

Reporting to Parliament

13.94 CIDA is improving its reports to Parliament to increase their focus on objectives and achievement of results. Its Part III of the 1995–96 Estimates presents more clearly information on the Agency's program objectives and priorities, and describes its approach to achieving and demonstrating development results. In future years, improved performance review information (such as the reviews of the six program priorities described in paragraphs 13.76 to 13.78) will strengthen further its ability to report to Parliament on results being achieved.

13.95 Since 1993, the Office of the Auditor General also has reported on two

other specific improvements by CIDA that are contributing to greater transparency and more useful reporting to Parliament. CIDA's Part III of the Estimates now contains more information on the effectiveness of Regional Development Banks. It also provides a description of Canada's International Assistance Envelope (IAE) that explains clearly the IAE activities carried out by CIDA and by other departments. In addition, CIDA officials have continued to appear on request before parliamentary committees.

13.96 Also of direct relevance to parliamentarians is CIDA's 1995–96 — 1997–98 Departmental Outlook. It will provide Parliament with further information on CIDA's key actions, priorities and directions. It also will strengthen further CIDA's accountability to Parliament and its reporting on progress made to date.

Report of the Auditor General of Canada to the House of Commons – 1995

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Report of the
**Auditor General
of Canada**
to the House of Commons

Chapter 14
Industry Canada:
Business Assistance Programs in Transition

October 1995

**Report of the
Auditor General
of Canada
to the House of Commons**

Chapter 14
Industry Canada:
Business Assistance Programs in Transition



October 1995

This October 1995 Report comprises 8 chapters and a Foreword and Main Points. In order to better meet clients' needs, the Report is available in a variety of formats. If you wish to obtain another format or other material, the Table of Contents and the order form are found at the end of this chapter.

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Chapter 14

Industry Canada

Business Assistance Programs in
Transition

The audit work reported in this chapter was conducted in accordance with the legislative mandate, policies and practices of the Office of the Auditor General. These policies and practices embrace the standards recommended by the Public Sector Accounting and Auditing Board (PSAAB) of the Canadian Institute of Chartered Accountants.

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Assistant Auditor General: Maria Barrados
Responsible Auditor: Gerry Chu

Industry Canada

Business Assistance Programs in Transition

Main Points

14.1 We audited four financial assistance programs, support to tourism and the Canada Business Service Centre initiative. Significant changes have been made to many of the programs audited.

14.2 Three financial assistance programs — Microelectronics and Systems Development, Strategic Technologies, and Technology Outreach have been terminated or are not being renewed. The Sector Campaigns were terminated. A new Tourism Commission has been established to take over Industry Canada's existing tourism programming. The commitment to Canada Business Service Centres is continuing and growing.

High-Technology Financial Contributions Programs

14.3 These programs are complex, entailing a long, multistep project approval process. Some of the assessment criteria are difficult to apply. However, improvements can be made in support for funding decisions. Where similar programs are operated by other departments, opportunities exist to improve the co-ordination of review and assessment procedures through sharing information and analysis of results. Progress is being made in developing and reporting performance measurement.

14.4 Our findings identify ongoing concerns for the management of the remaining program commitments and obligations. They also raise issues of potential importance to many other government programs that provide assistance through contributions. For example, the Department's implementation of the repayable contributions policy needs to be reviewed to ensure that it is consistent with the intent of the policy.

14.5 There is a risk that, as the government withdraws from some program areas, its remaining obligations will be undermanaged. Even though programs are not being renewed or are being terminated, they retain risks that require management attention. Our audit identified areas where management needs to remain attentive, including ensuring that payments are made only for eligible costs and that contributions repayable to the Crown are managed appropriately.

Tourism

14.6 Industry Canada continued to have difficulties both in developing co-ordinated approaches to the tourism activities and in evaluating the effectiveness of the tourism sub-agreements.

14.7 The challenge for the newly formed Canadian Tourism Commission will be to develop co-ordinated approaches to the management of these activities and to work closely with other federal departments and agencies to develop co-operative approaches in tourism initiatives.

Main Points (cont'd)

Canada Business Service Centres (CBSC)

14.8 This initiative was introduced in 1992–93 to serve business better by creating one access point. In a short period of time, CBSCs have made progress in forming partnerships with federal departments, agencies and provinces, and 10 centres have been established.

14.9 Judging the success of the CBSC network requires that a clear vision of the concept be articulated. In addition, expectations for the core services to be provided have yet to be defined.

14.10 The centres are at a key juncture in their development, and must decide quickly with their partners what their long-term vision and strategy should be. The federal government can then in turn more easily determine its most effective contribution to integrating access to business services.

Introduction

14.11 Industry Canada is a key department in economic development. It has a mandate to make Canada more competitive by fostering the development of Canadian business, promoting a fair and efficient Canadian marketplace, and protecting, assisting and supporting consumer interests.

14.12 At the start of our audit in the spring of 1994, the Department was organized into two programs: Industry and Science Development; and Services to the Marketplace. Industry and Science Development focussed on enhancing the growth of Canadian business; Services to the Marketplace focussed on the fair and efficient operation of regulations affecting businesses and consumers. At that time, the Department administered 54 funded programs, many of which provided financial assistance to businesses and other partners in program delivery.

14.13 The federal Budget of February 1995 reduced funding for the Department's economic development programs. Subsidies to business and industry associations are to be reduced by approximately \$200 million over a three-year period. Of the 54 Industry Canada-funded programs, 9 programs were terminated and 34 will not be renewed beyond 1997-98. Eleven programs will continue.

14.14 There will be no increases in the budgets of programs that are not being renewed, and no new financial commitments can be made under the programs that have been terminated. However, the Department will need to manage these programs until all program terms and conditions are fulfilled. Many of the programs are delivered through contribution agreements that require future payments to recipients and the

monitoring of performance until projects are completed. In addition, many of the agreements include clauses requiring repayments to the government.

14.15 As it redefines its programs, Industry Canada is placing increasing emphasis on providing information to business. In a rapidly changing business environment, information is viewed as essential to the growth of existing businesses and the formation of new business enterprises. This emphasis is reflected in the Department's role in managing and supporting the newly formed Canada Business Service Centres network and in developing strategic intelligence and information products.

Audit Scope and Approach

14.16 The audit scope and approach were initially set in the spring of 1994. We selected for audit four financial assistance programs, support to tourism and the Canada Business Service Centre (CBSC) initiative. These are part of the Industrial and Aboriginal Programs and the Regional Operations activities of the Industry and Science Development Program, as shown in Exhibit 14.1.

14.17 Our objective was to assess the adequacy of management practices and conformity with government policies on grants and contributions and on review and evaluation.

14.18 During our audit, a number of these programs were changed. Three of the financial assistance programs directed at the high-technology sector were terminated or not renewed. The Technology Outreach Program has been terminated. The Microelectronics and Systems Development Program and the Strategic Technologies Program will not be renewed, and payments will not be made under them beyond 1995-96 and

Industry Canada is a key department in economic development.

Of the 54 Industry Canada-funded programs, 9 programs were terminated and 34 will not be renewed beyond 1997-98.

1997–98 respectively. The Sector Campaigns, four of which we audited, are also being terminated.

14.19 We also examined Industry Canada's role in the management of federal-provincial/territorial sub-agreements on tourism, and Tourism Canada. Tourism Canada is being wound up and the tourism sub-agreements will not be renewed, but a new organization called the Canadian Tourism Commission (CTC) was established on 31 January 1995. The Commission took over the

tourism responsibilities that previously were managed by Industry Canada.

14.20 The commitment to Canada Business Service Centres is continuing and growing.

14.21 Our audit approach to the financial assistance programs included a detailed review of project files, comparison with similar federal and provincial programs, field visits, discussion with management and project officers and use of internal studies and reports. Our work on the Canada Business

Exhibit 14.1

Industry and Science
Development Program

	Estimates (\$000) 1994–95		Full-Time Equivalents
	Grants and Contributions	Other	
Industrial and Aboriginal Programs	403,444	112,468	897
<ul style="list-style-type: none"> • Microelectronics & Systems Development Program • Strategic Technologies Program • Sector Campaigns • Tourism Canada 	11,456 22,781 43,574	16,500	
Regional Operations	319,228	71,969	788
<ul style="list-style-type: none"> • Technology Outreach Program • Tourism Subsidiary–Agreements • Canada Business Service Centres 	17,396 12,130	8,846 3,374	
Industry and Science Policy	30,184	29,765	280
Communications Research	6,891	83,274	417
Corporate and Advisory Services		89,261	727
Total	759,747	386,737	3,109

☐ Contributions programs and activities covered in audit

Source: Departmental Part III Estimates and Budgets (1994–95)

Service Centres was based on a review of documentation and discussions with management and staff and some clients in several locations across Canada.

14.22 Although significant changes have been made to many of the programs we audited, our findings remain relevant to the management of the remaining program commitments and obligations. In addition, our findings raise issues of potential importance for new programs and many other government programs that provide assistance through contributions.

Observations and Recommendations

High-Technology Financial Contributions Programs

Description of Programs

14.23 In the mid 1980s, the federal government introduced a number of major initiatives to promote the development of high-technology industries because industrial growth was seen to be more dependent on scientific, technological and industrial adaptability and responsiveness. The four programs that we audited were part of this initiative:

- The Microelectronics and Systems Development Program (MSDP), launched in January 1988, was designed to enhance the growth and international competitiveness of microelectronics and information technologies in Canada's manufacturing, processing and service industries.
- The Strategic Technologies Program (STP), also introduced in 1988, focussed on the development, acquisition, application, and diffusion of three priority technologies: information technology;

advanced industrial materials; and biotechnology.

- The Technology Outreach Program (TOP), created in 1986, was designed to assist in the diffusion of new technology and the transfer of critical industrial management skills to Canadian industry.
- The Sector Campaigns initiative was begun in 1988 to seek effective integration of advanced technology and industrial competitiveness in selected Canadian industries or sectors.

14.24 These four programs had authorized assistance totalling approximately \$395 million. Exhibit 14.2 shows the status of the four programs, a summary of the total assistance authorized under them and their budgeted expenditures to 1997-98.

Management of Programs with Financial Contributions

14.25 When businesses apply for financial assistance, Industry Canada must: assess projects against eligibility criteria; establish contractual arrangements; maintain management and financial systems to monitor projects and make payments; enforce repayment provisions where applicable; conduct evaluations; and provide accountability reporting.

Projects are often time-sensitive but the approval process is time-consuming

14.26 Departmental data indicate that the average time to approve a project was 287 days in the Microelectronics and Systems Development Program and approximately 299 days in the Strategic Technologies Program. In many cases, approval times exceeded a year. A departmental survey of recipients indicated that they viewed the approval process as "long and arduous". Recipients said that delays in the approval process

Recipients said that delays in the approval process were not closely matched to time frames in the business environment.

were not closely matched to time frames in the business environment, adding to the uncertainty surrounding many business decisions.

14.27 Complicating the approval process is the need for the Department to obtain detailed documentation or expert advice. Often, projects are reviewed by several officers and interdepartmental and departmental committees before being recommended for approval and, in some cases, ministerial approval.

Assessment of applications against key criteria

14.28 Applications for funding follow a multistep approval process. For example, when a company applies for financial assistance under the Microelectronics and Systems Development Program or the Strategic Technologies Program, a project officer in the Department's regional office or at headquarters is assigned to perform an initial review of the application to determine whether it is eligible. Eligibility for assistance under the Strategic

Exhibit 14.2

High-Technology Financial Contributions Programs Audited

Names of Programs	Target Clients	Total Authorized Assistance	Program Status	Budgeted Expenditures 1995-96 to 1997-98
Microelectronics and Systems Development Program	Canadian suppliers and end-users in microelectronics and information technology	\$60 million <ul style="list-style-type: none"> 30 projects ranging from \$137,261 to \$5 million, avg. \$2 million per project 	Not renewed	\$1.5 million
Strategic Technologies Program	Alliances among companies, universities or research institutes involving: <ul style="list-style-type: none"> Advanced industrial materials Information technology Biotechnology 	\$95 million <ul style="list-style-type: none"> 89 feasibility studies 60 projects ranging from \$107,307 to \$6.1 million avg. \$ 1.5 million per project 	Not renewed	\$39 million
Technology Outreach Program	Not-for-profit technology centres	\$128 million <ul style="list-style-type: none"> 37 technology centres assistance ranging from \$41,000 to \$19.3 million, avg. \$3.5 million per centre 	Terminated	\$33.3 million
Sector Campaigns	Industry associations and business consortia in specific industry sectors	\$112 million <ul style="list-style-type: none"> 14 industry sectors assistance ranging from \$1.4 million to \$56.4 million, avg. \$8 million per sector campaign 	Terminated	\$28.2 million

Source: Office of the Auditor General

Technologies Program, for example, is limited to corporations and partnerships operating in Canada that represent alliances. If the application is eligible, the project officer performs an analysis of the company and the proposed project to ensure that criteria common to all projects, as well as program-specific criteria, are satisfied.

14.29 Basic program criteria apply to all Industry Canada's funded programs. These criteria deal with commercial and economic viability, significant economic benefits to Canada, and incrementality (whether the project would proceed without assistance) and need.

14.30 Program-specific criteria are described in the terms and conditions covering the program and they must be satisfied before an authorization for assistance can be recommended. For example, the selection of projects for assistance under the Strategic Technologies Program is based on the extent to which they meet selection criteria such as technological innovation and risk, and enhancement of Canada's scientific and technological skills, knowledge and personnel.

14.31 In performing the analysis, the project officer can request comments from an industry sector branch at headquarters, and can seek external expert advice where necessary. The project officer prepares a project summary incorporating the analysis for review by managers.

14.32 Project summaries of recommended projects are submitted to an interdepartmental project review committee. Recommended projects are then reviewed by the Department's Programs and Services Branch before they are finally approved by the Department, or by the Minister if the authorized assistance is for more than \$100,000. This

threshold was raised to \$5 million as of March 1994.

Improvements can be made in supporting the case for funding

14.33 Given the approval process in place, we expected that funding decisions would be supported by persuasive assessments and clearly stated rationales. In response to our 1985 Report, the Department had made a commitment to ensure that the factors considered would be applied more consistently and be better documented.

14.34 However, in reviewing the Department's assessment of strategic considerations and economic benefits, we found that information contained in business applications is often based on optimistic forecasts of potential sales and economic benefits. Usually, it is not possible for departmental officials to verify this information. They rely on their own knowledge and experience and other economic and business data from similar projects and businesses.

14.35 An assessment of incrementality attempts to determine whether a project would proceed at that time and place if government financial assistance were not provided. Despite the Department's commitments to improve its support for funding decisions, our examination of project files still found weaknesses in the cases made for funding. Project justifications frequently use judgmental statements such as, for example, Without financial support, it is unlikely that the applicant will be capable of undertaking a project of this level of risk, and certainly not within the specified time frame. These statements often are used without clear supporting analysis.

14.36 As part of assessing incrementality, project officers are expected to consider the applicant's

Basic program criteria deal with commercial and economic viability, significant economic benefits to Canada, and incrementality and need.

Information contained in business applications is often based on optimistic forecasts of potential sales and economic benefits.

Decisions to contribute were often made without a persuasive assessment of incrementality.

The fact that similar programs were also operated by other federal and provincial government departments has resulted in multiple departments serving companies in the same industry sectors.

financial capability in determining whether there is a demonstrated need for government assistance. The issue of financial need lends itself to more objective analysis. For example, project officers can review the applicant's audited financial statements, and can compare projected costs with the applicant's current assets or working capital.

14.37 Even where an applicant's financial position suggested that financial need was not in itself an issue, we found that decisions to contribute were made without a persuasive assessment of incrementality. For example, a company that had \$86 million in working capital at the time of its application received \$979,623 in financial assistance, for a biotechnology project costing \$2.2 million. The file contained no reference to whether the project would have gone ahead without funding, other than the statement that "support at the 45 percent level is considered sufficient for the project to proceed."

14.38 The Department subsequently furnished additional information that it believes provides rationale to support the decision. However, in our opinion, this additional information does not include a persuasive assessment of incrementality. Further, the information was not included in the project summary that the Minister signed.

14.39 The Department should ensure that funding decisions are supported by persuasive assessments.

Department's response: The Department was in the process of reassessing project evaluation procedures at the time of the present budget when it was decided to terminate or not renew most programs. The necessity to improve documentation concerning the argumentation for project support for ongoing or future programs is understood and is being undertaken.

Consequently, within existing resource constraints, the Department will examine methodologies of providing more extensive details of the assessment process on our central files.

Opportunities exist to improve co-ordination of review and assessment procedures

14.40 Since the mid-1980s, there has been a substantial increase in the number of financial assistance programs available to business. Many of these programs were targeted at the high-technology and specialized industry sectors. At the start of our audit, Industry Canada's program structure included 11 programs that provided financial assistance to high-technology industry sectors.

14.41 A number of similar programs were also operated by other federal and provincial government departments. This has resulted in multiple departments serving companies in the same industry sectors, each having to put in place its own sector expertise and its own approval and administrative procedures.

14.42 Often, applicants qualify under different programs. Our analysis revealed that 44 percent of MSDP and STP recipients outside Ontario also applied for financial support from regional development agencies, either for the same project or for other projects. (See Exhibit 14.3.) In addition, technology centres can receive funds from several sources. One technology centre that received funding under the Technology Outreach Program also received government funds from over 10 other sources, totalling \$1.2 million in a three-month period.

14.43 Our examination of project files showed that regardless of the number of times an applicant has obtained government funding, each application is assessed on a project-by-project basis

with little apparent consideration of past analysis and review of the applicant's business position in the sector and its financial need.

14.44 Where several agencies continue to provide related services and assistance, opportunities exist to improve the co-ordination of their review and assessment procedures by sharing and exchanging information and analysis of results achieved by recipients on projects funded by public money.

Programs not being renewed or being terminated retain risks that require management attention

14.45 Despite the reductions in program expenditures, the obligation remains for managers to ensure that essential financial controls are in place and that financial risks are managed properly.

14.46 Although the four programs we audited have been terminated or will not be renewed, \$100 million remains to be paid out under these programs and approximately \$75 million in contributions is still to be repaid as of 31 March 1995. Departmental managers

must continue to manage what remains of these programs and their contribution agreements until all contract terms and conditions are fulfilled. This includes review and audit of costs claimed and reporting of results achieved by recipients.

14.47 Industry Canada makes payments for eligible costs incurred under contribution agreements, based on financial claims and information submitted by the recipient. Risks facing the Department include that of paying for costs that are not eligible, such as costs that have been funded by other government programs. For example, in the five technology centres funded under the Technology Outreach Program that we examined, departmental audits found that some costs claimed had, in fact, also been claimed from other government agencies. In one case the auditors reduced the claimed amounts by \$938,000 and, therefore, the Department's share by \$534,000.

14.48 These findings show the continuing need for and value of audit. The Department needs to ensure that the risk of paying ineligible costs is managed appropriately.

Although the four programs we audited have been terminated or not renewed, \$100 million remains to be paid out under them and approximately \$75 million in contributions is still to be repaid.

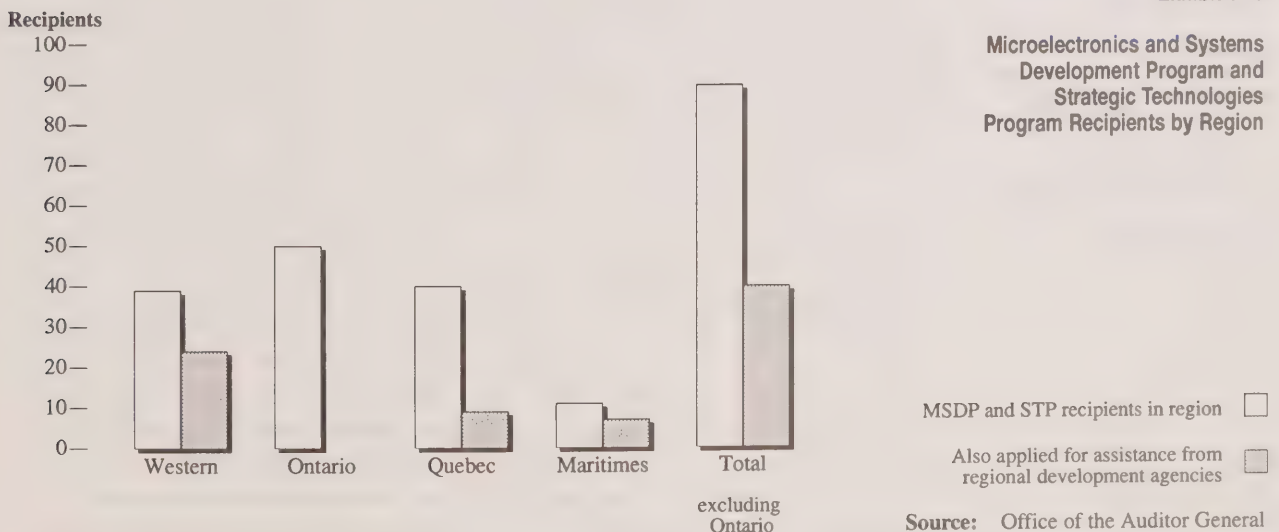


Exhibit 14.3

Microelectronics and Systems Development Program and Strategic Technologies Program Recipients by Region

Although the government encourages the use of repayable contributions, the vast majority of contributions under the programs we audited are non-repayable.

The Department's application of guidelines on the terms and conditions of repayment is not consistent with that of other agencies.

The application of the policy on repayable contributions requires clarification

14.49 In April 1990, Treasury Board approved a policy on repayable contributions that, subject to specific exemptions, required all contributions to business to be repayable and established specific guidelines for repayment terms. The objective of the policy was to orient government business assistance programs more toward investing in economic development than subsidizing the private sector. The Minister may exempt contributions from repayment. Exemptions may also be made if contributions:

- are to not-for-profit entities that will not generate sufficient revenues to repay the contribution;
- are less than \$100,000 (lower thresholds may be established by departments and agencies);
- will result in no quantifiable benefit accruing to the recipient as a direct result of the project;
- will result in the benefits of the project accruing to an industrial sector or an unrelated third party; or
- are for projects undertaken within the framework of existing federal-provincial regional and economic development agreements and sub-agreements.

14.50 Although the government encourages the use of repayable contributions, the vast majority of contributions under the programs we audited are non-repayable.

14.51 Authorized assistance under the four programs audited totalled approximately \$395 million. Most of these expenditures were made after the policy came into effect. Of this amount,

approximately \$112 million was for contributions to industry associations authorized under Sector Campaigns, and \$128 million for not-for-profit technology centres under the Technology Outreach Program. With few exceptions, these contributions were exempted from repayment. The Department also exempted other contributions, totalling approximately \$65 million. As a result, only \$90 million of the authorized assistance is repayable.

14.52 Industry Canada's implementation of the repayable contributions policy appears to be different from other departments. For example, the Department decided that its contribution of \$3.75 million to a company would not be repayable, although a contribution by a federal regional development department of the same amount and for the same project is repayable.

14.53 In addition, the Department's application of guidelines on the terms and conditions of repayment is not consistent with that of other agencies. For example, in another project funded by both Industry Canada and another federal regional development department, the \$644,649 contribution made by the other department was required to be repaid in full within five years. Industry Canada's contribution of the same amount was to be repaid over 10 years, conditional on the company's sale of the innovative product. If Industry Canada's contribution is not repaid fully in 10 years, the balance will be forgiven.

14.54 Industry Canada should review its practices to ensure that its application of the policy on repayable contributions is consistent with the intent of the policy to orient government assistance programs more toward investment than subsidization.

Department's response: *Because many of its contributions involve support for small projects, and not-for-profit entities, and projects where the benefits occur to an industrial sector, these contributions have often been made non-repayable as permitted by Treasury Board policy. However, as a result of the February 1995 Budget and the shift away from industrial subsidization, Industry Canada has moved to more fully align its repayable policy to the new direction of the government.*

Greater care is needed in controlling repayable contributions

14.55 Repayments of contributions, which are normally free of interest, can be unconditional and based on a time schedule or conditional, based on product royalties. Managing and controlling the repayment of contributions requires an accurate accounting system for repayable contributions, knowledge of the business and clearly assigned responsibilities.

14.56 Currently, under the MSDP and STP Industry Canada has about 50 repayable contributions totalling approximately \$75 million, mostly conditional on product royalties. These are due for repayment over the next 10 years. Repayment terms are usually based on a percentage of the company's sales attributable to the resulting innovative product. The Department's Resource Accounting Management System contains the information that controls the due dates for repayments. When a repayable contribution is due, the system is instructed by the Finance Branch to trigger an invoice requesting the recipient to remit an amount due, stated as a proportion of sales.

14.57 Our audit identified six out of 27 conditionally repayable contributions under the MSDP and two out of 23 under the STP that had been recorded in the system erroneously. For example, no

action had been taken on a repayable contribution of \$1.55 million that had been recorded in the system as non-repayable. The first repayment was supposed to have been due in 1993 but there was no evidence that any payments had been received. These errors, if undiscovered, could have resulted in a potential loss of \$7.5 million in future repayments to the Crown. We have informed the Department of these errors.

14.58 For proper management and control of repayable contributions, accounting information must be correct, judgment needs to be applied to deciding the amount and timing of repayment, and amounts need to be verified.

14.59 Monitoring and verification of royalties due and owing, based on sales, requires familiarity with the detailed operations of the company. However, as the programs under which contributions were paid are being terminated or will not be renewed, project officers in regional sector branches who used to deal with the companies are no longer involved in the projects. Responsibility for monitoring and verifying repayment of contributions had not been clearly assigned.

14.60 As the Microelectronics and Systems Development Program and the Strategic Technologies Program are not being renewed and resources are being withdrawn, there is a risk that insufficient attention will be paid to monitoring and verifying repayment of contributions. We believe that greater care is needed.

14.61 **The Department should clearly assign responsibility for monitoring and verifying repayment of contributions.**

Department's response: *The Department has undergone a major reorganization as a result of the February 1995 Budget. As a result of this organization, delivery of these programs will be centralized in Ottawa. A unit to handle both program*

Managing and controlling the repayment of contributions requires an accurate accounting system for repayable contributions, knowledge of the business and clearly assigned responsibilities.

delivery and repayment activities has already been established. Prior program delivery in the regional offices and industry sector branches has resulted in some potentially repayable projects being missed or miscoded on the management information system. Consequently, files will be checked to ensure that all repayables are in the system and are being effectively managed and controlled.

Measuring Results

Progress is being made in developing performance measures and in reporting performance information

14.62 Information on results can be obtained from ongoing performance measurements and periodic studies to assess the effectiveness of the high-technology and industry sector programs. Performance measurement systems begin with the development of an evaluation framework. The government's approval of these programs requires such frameworks to be established within a reasonable time period. This was done for Microelectronics and Systems Development Program (MSDP), Strategic Technologies Program (STP), Technology Outreach Program (TOP) and for most Sector Campaigns.

14.63 One purpose of a program evaluation framework is to assist in the identification of appropriate performance indicators. In 1992, the Department developed a project-based information system covering MSDP, STP and TOP. However, it encountered difficulties in keeping information current. Many projects did not have up-to-date information on performance over the term of the contribution agreements.

14.64 We found that, with a commitment to improve the measurement and reporting of performance information,

progress can be made. This was shown in one of the programs audited. Prior to 1993, TOP contribution agreements with technology centres focussed on activities to be conducted and included few performance targets. However, the more recent agreements are performance-oriented. In May 1993, the Department began collecting performance-based information to evaluate and assess costs, client contact and impact of the TOP program. Each centre is required to report quarterly both qualitative and quantitative information to facilitate the Department's assessment of the centre. A recent internal audit noted that the system is providing useful and reliable data for assessing benefits and program results.

14.65 In 1992 the Department completed evaluation study reports on the MSDP and STP programs. Both evaluations concluded that it was difficult to determine the impacts of the programs because many projects had not been completed at the time of evaluation.

14.66 Although evaluation frameworks have been established for most of the 14 sector campaigns, evaluations have been completed for only two. Management used both of these evaluations to improve the delivery of the program and increase the quality of information used to measure program results.

Ongoing Concerns

14.67 The programs we audited that provide financial assistance through contributions involve a number of complexities for managers. The project approval process is long and has many steps. Some of the criteria, particularly those related to need and incrementality, are difficult to apply. However, the support for funding decisions can be improved.

In May 1993, the Department began collecting performance-based information to evaluate and assess costs, client contact and impact of the Technology Outreach Program.

14.68 In addition, the Department needs to review its implementation of the policy on repayable contributions to ensure consistency with the intent of the policy.

14.69 Industry Canada is in the process of streamlining its programming. In the past, opportunities existed to improve the co-ordination of review and assessment procedures through sharing information and analysis of results. Where similar programs are operated by other departments, these opportunities will still exist.

14.70 There is a risk, as the government withdraws from some program areas, that its remaining obligations will be undermanaged. Even though programs are not being renewed or are being terminated, they retain risks that require management attention. Our audit identified areas where management needs to remain attentive, including ensuring that payments are made only for eligible costs and that contributions repayable to the Crown are managed appropriately.

Tourism

Background

14.71 Industry Canada supported the tourism industry through two branches in the Department. Regional Operations administered sub-agreements with the provinces and territories. Tourism Canada, with an operating budget of \$16.5 million for 1994-95, marketed Canadian tourism in the international marketplace and provided business services to the tourism industry.

14.72 The sub-agreements with the provinces/territories support such activities as product development, international marketing and business services. The total Industry

Canada-authorized contribution to these sub-agreements is \$86 million. The sub-agreements run for periods of three to five years, the last one expiring in March 1997. In the February 1995 Budget these sub-agreements were not renewed.

Industry Canada had difficulty co-ordinating its tourism activities and evaluating the effectiveness of tourism sub-agreements

14.73 Tourism Canada had the primary role in promoting Canada on the international marketplace. However, international marketing is also funded by the federal government through the tourism sub-agreements. Nine of the 13 sub-agreements, which were administered by the regional offices of Industry Canada, involved international marketing activities. Some of the marketing activities undertaken under the sub-agreements were in the same target markets as those of Tourism Canada.

14.74 In our 1985 Report, we recommended that the Department increase the level of consultation between the Tourism Branch at headquarters and the regional offices delivering the tourism subsidiary agreements, so that departmental expenditures on tourism could be monitored more effectively. A 1988 internal audit report on the delivery of tourism sub-agreements found continuing difficulties in co-ordination.

14.75 Since then, there have been a number of organizational changes in the Department, in addition to the establishment of regional agencies by the government. However, co-ordination difficulties remain.

14.76 The two branches in Industry Canada continued to have difficulties in developing co-ordinated approaches to the tourism activities of the Department. We found few instances of communication

There is a risk, as the government withdraws from some program areas, that its remaining obligations will be undermanaged.

International marketing has been funded by the federal government through the tourism sub-agreements as well as through Tourism Canada.

and co-ordination of marketing activities between the regional offices administering the sub-agreements and Tourism Canada. At times, even regional offices of Industry Canada found it difficult to co-ordinate similar marketing initiatives.

14.77 The completion of an evaluation is a requirement of all the tourism sub-agreements. An evaluation framework sets out a plan to collect and interpret baseline data, ongoing program performance indicators and a tentative plan for future evaluation of the program.

14.78 An evaluation framework must be completed for these agreements, usually within six months of the signing of the agreement. This was not done for two of the five sub-agreements that we reviewed, nor were evaluations completed for these sub-agreements.

Major change has taken place

14.79 The government appointed the Hon. Judd Buchanan as a special advisor on tourism, to determine how the federal government could enhance tourism to eliminate the tourism deficit and significantly increase the number of jobs in the sector.

14.80 The Buchanan Report on Tourism recommended the creation of a Canadian Tourism Commission, directed by a board with representatives of governments and the private sector. As recommended, the Canadian Tourism Commission was established on 31 January 1995 with a budget of \$50 million. Federal funds are to be partnered with funds from provincial/territorial governments and private sector partners.

14.81 The CTC Board is authorized to plan, direct, manage and implement new programs to generate and promote tourism in Canada. It reports to the Minister of Industry and includes 16 members from

the private sector, 7 members representing the provincial/territorial governments, the Deputy Minister of Industry Canada and two Governor in Council appointments (the Chairperson and the President of the Commission).

14.82 The Canadian Tourism Commission became responsible for marketing Canada as a tourist destination to the international and the domestic markets. The tourism sub-agreements with the provinces and territories are administered by Industry Canada staff reporting directly to the President of the Commission.

14.83 In the past, the government was responsible for the administration and management of tourism projects. The creation of the Canadian Tourism Commission represents a new approach for the federal government to partnerships in the area of tourism.

14.84 The Commission is now responsible for all the tourism activities previously managed by Industry Canada. The challenge for the Commission will be to develop co-ordinated approaches to the management of these activities.

14.85 An additional challenge for the Commission will be to co-operate with other federal departments and agencies to avoid any unnecessary overlap and duplication in tourism initiatives.

14.86 The creation of the Commission gives the government an opportunity, in changing the delivery of tourism programming, to build accountability for results into the new partnership arrangements. The CTC has indicated to the Standing Committee on Industry its commitment to evaluating its performance. In addition, the Commission has recently issued its Charter document, which confirms its commitment to an effective accountability regime, including

The creation of the Canadian Tourism Commission gives the government an opportunity to build accountability for results into the new partnership arrangements.

an annual report to Parliament. Although it is too early to comment on the potential success of this initiative, we are encouraged by these commitments and will monitor the Commission's progress in meeting them.

Canada Business Service Centres

Introduction

14.87 Businesses are in contact with governments for a variety of reasons that can range from meeting regulatory requirements, such as licensing, taxation, and incorporation, to obtaining marketing information and financial assistance. Numerous government organizations exist to service these needs.

14.88 The Canada Business Service Centre (CBSC) initiative was introduced in 1992–93 to serve business better by creating one access point. The initiative was to address complaints of overlap, duplication, inefficiency and complexity. It is a collaborative effort by many federal departments, provincial governments and private sector organizations. The new centres were built, in collaboration with provincial establishments, on the former Business Service Centres established and operated by Industry Canada in the early 1990s.

14.89 Key elements of the management structure are listed below. At the national level there is an Assistant Deputy Ministers Committee of Managing Partners, comprising Industry Canada, Treasury Board Secretariat and the three regional development agencies. Its mandate is to provide guidance to the network of federal partners and operational direction to the CBSC National Secretariat in Ottawa. There is also a CBSC Operations Managers

Committee composed of the 10 on-site operations managers. Its purpose is to share best practices and discuss issues of regional and national interest. In each region there is also a Regional Federal Partners Committee. The primary function of the CBSC National Secretariat is to provide centralized support to the network of regional CBSCs and to facilitate development of the CBSC initiative. It does this by providing support to the various committees mentioned above. It also has a complementary function of co-ordinating the dissemination of information from the participating federal business departments.

14.90 There are 10 operating Canada Business Service Centres, one in each province, and plans are being developed to expand the initiative. As of March 1995, Industry Canada was responsible for managing three of the ten CBSCs. The other centres were managed by the three federal regional development agencies.

14.91 The federal government's share of the 1994–95 budget for the ten CBSCs was about \$6.5 million. The federal government increased the allocation to \$15 million for 1995–96 and subsequent three years, for expansion of CBSC services to meet an increased demand.

Outstanding Issues to Be Resolved during Further Implementation

14.92 A number of issues related to the concept still have to be settled, including the overall vision, the role to be played by the various partners, the core services to be provided and the quality of information to be disseminated.

14.93 Starting in the fall of 1992, three pilots were established in Halifax, Winnipeg and Edmonton to test different aspects of improving service to business. Surveys and complaint analysis conducted

The Canada Business Service Centre initiative was introduced in 1992-93 to serve business better by creating one access point.

A number of issues related to the concept still have to be settled, including the overall vision, the role to be played by the various partners, the core services to be provided and the quality of information to be disseminated.

Judgments of the success of the CBSC network require that a clear vision of the concept be articulated.

in two of the pilots showed that users of CBSC services were generally satisfied with them. However, the overall results of the pilots were inconclusive and, in some cases, not reported until after the government had announced in the spring of 1993 that 10 centres, one in each province, would be created.

Clarification of the concept

14.94 Several other initiatives at the provincial, regional and local levels aim to improve accessibility by business to government information and services. For example, some provinces have their own network of Business Service offices, and others work in partnerships with Chambers of Commerce. Many of these provincial networks provide federal as well as provincial and municipal information.

14.95 The approach to avoiding overlap and duplication in existing services was to develop partnerships in the form of joint ventures. As of March 1995, the federal government had signed agreements with three of the provinces and with a Chamber of Commerce in another province.

14.96 There are informal cost-sharing arrangements in three provinces. Also, two centres include local partners in delivering information and advisory services jointly with federal and provincial partners. Some CBSCs used private sector agencies and associations as members of their advisory committee. At the time of our audit, the federal government was aiming to negotiate an arrangement with the remaining provinces and the two territories that have not been active participants in this initiative.

14.97 While flexibility is required in negotiating partnerships that meet local needs, the concept is not clear. Are CBSCs intended to be “one-stop

shopping” for all government-related business needs, a “single point of contact” to provide referral to federal services, or something in between? Judgments of the success of the CBSC network require that a clear vision of the concept be articulated.

Definition of core services

14.98 In addition to the lack of a clear vision of the type of centres to be established, the core services to be provided have not been articulated. Services at CBSCs range from provision of basic information to referrals to other agencies and experts, to various levels of diagnostic and counselling capabilities. Exhibit 14.4 shows in schematic form a typical delivery process with these elements.

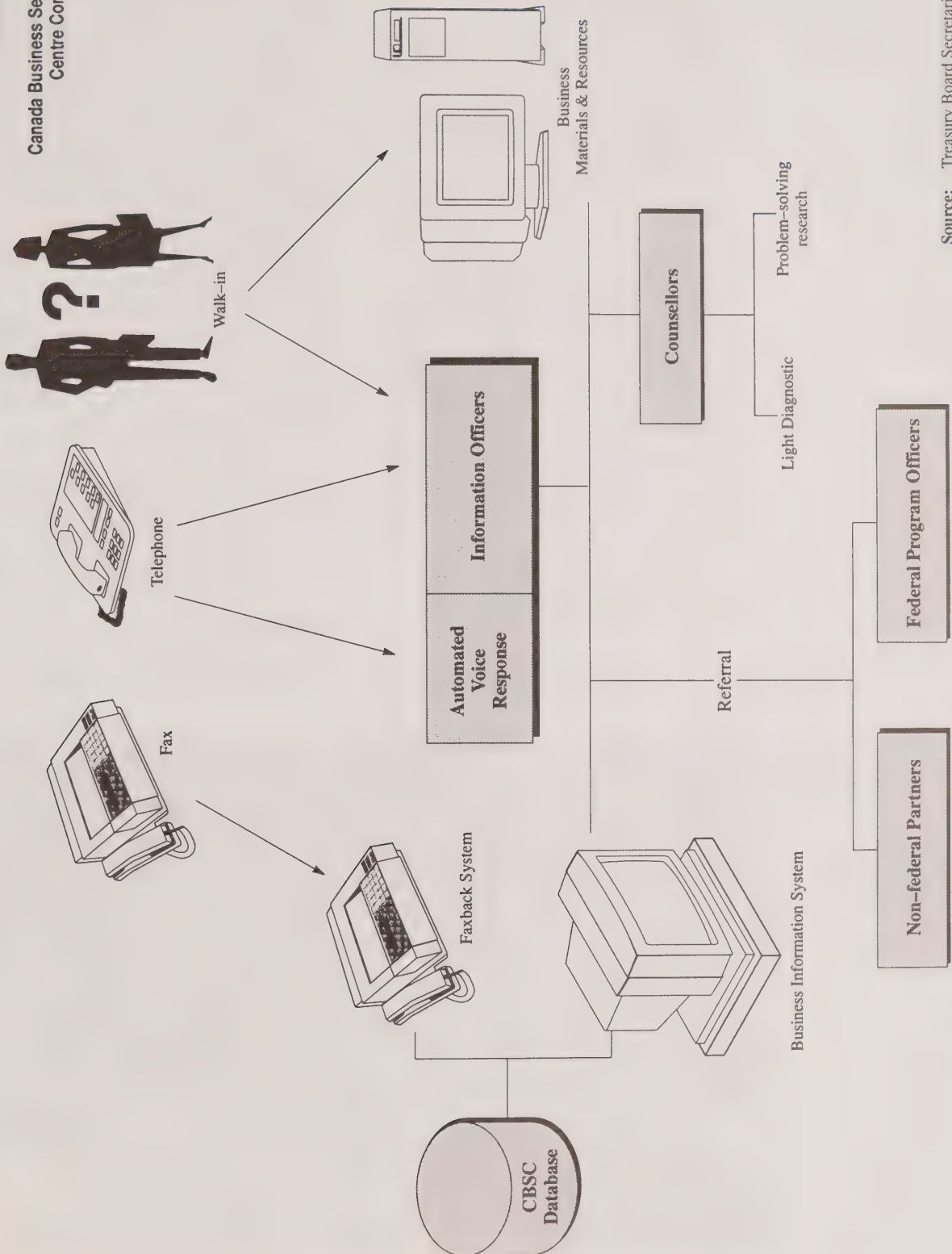
14.99 The variation in available services and the different approaches to providing service point to the importance of establishing guiding principles on the core services that are to be available nation-wide. Each CBSC can then define its services in relation to those principles.

14.100 Consultations carried out as part of the National Evaluation Framework showed a clear preference for national guiding principles with a limited number of basic service standards. The final report indicated a consensus that users should be able to expect a minimum level of service regardless of location.

14.101 No national service standards have yet been agreed to and discussions about what core services should be supported nationally were still ongoing in the spring of 1995. The uniqueness of each CBSC in service delivery, partnership structure and client expectations could mean that service standards do not apply equally. However, it is important to set out the standards as a

Exhibit 14.4

Canada Business Service
Centre Concept



Source: Treasury Board Secretariat

basis for assessing progress in implementing the concept.

14.102 Industry Canada, with the CBSC Managing Partners Committee, should develop a common vision, national guiding principles and a limited number of basic service standards for Canada Business Service Centres.

Department's response: The Canada Business Service Centre Managing Partners Committee, representing Atlantic Canada Opportunities Agency (ACOA), Federal Office of Regional Development – Quebec (FORD-Q), Western Economic Diversification (WED), Industry Canada and Treasury Board Secretariat, is developing a future framework document for this initiative which will address these issues. This document will be completed prior to 31 March 1996.

Improvements are needed in the information provided

14.103 A key part of the service provided by CBSCs is the provision of

information, which is expected to be accurate, timely and relevant to user concerns. CBSCs need to obtain data from various sources to answer client requests. The centres have made significant strides toward forming partnerships with 21 federal departments and agencies. For example, the federal Business Information System (BIS), a database of federal business programs and services, is co-ordinated by the National Secretariat in Ottawa. There are also electronic hook-ups to various databases such as Industry Canada's Business Opportunities Sourcing System (BOSS). Most of these databases are independently maintained and controlled by participating government departments and agencies.

14.104 CBSC management is of the view that, while BIS meets some of the information needs of the CBSC users, it has a number of gaps in information. For example, information on new and discontinued programs is not always kept current and documents from partner departments are not always available.

Services at Canada Business Service Centres range from provision of basic information to various levels of diagnostic and counselling capabilities (see paragraph 14.98).



Furthermore, a study carried out by the Department concluded that some of the company information in the BOSS database was outdated. Our audit work confirmed this conclusion.

14.105 We examined information packages received from CBSCs for typical business situations. For small business start-ups, CBSCs were able to provide useful and comprehensive information of a general nature. However, they could not respond adequately to queries about regulatory requirements in particular industries, such as environmental guidelines or communications technology regulations.

14.106 CBSCs are now in the process of obtaining more complete information on government regulatory requirements. The Department is currently pilot-testing different methods of disseminating information.

14.107 The National Secretariat should assist Canada Business Service Centres in resolving problems with the quality of data on federal services and information.

Department's response: The Canada Business Service Centres (CBSC) National Secretariat is committed to maintaining the integrity of the federal database of programs and services and is implementing procedures to ensure the accuracy and timeliness of information disseminated to the CBSCs. To achieve these objectives, the Information Management Committee, comprising representatives from each Managing Partner and chaired by the National Secretariat, will be used to identify issues and concerns and develop common solutions. New procedures will be implemented in the fall of 1995.

Industry Canada as a whole is committed to providing public access to quality strategic business information products.

Under the Department's 1995-96 Information Product Plan, the Canadian Company Capabilities Product Line is one for priority development. The Canadian Company Capabilities, a multimedia online system, is subsuming the Business Opportunities Sourcing System (BOSS) and will implement standards and procedures to improve the quality and ease of access to this information. This new system will be implemented this fiscal year.

Challenge for the Future

14.108 It is complex and difficult to establish partnerships with other levels of government and private sector organizations. Therefore, continuous effort is required to build the partnership arrangement necessary to deliver better integrated services to businesses.

14.109 In a short period of time, CBSCs have made progress in forming partnerships with federal departments, agencies and provinces. They have established a presence across the country through 10 centres and attracted a clientele for their services. CBSC statistics show that inquiries have increased significantly.

14.110 These arrangements could form the foundation for integrating CBSCs with provincial and local business service centres to meet business needs. An incremental approach has been taken to developing the concept. However, as the network is expanded it is important to articulate clearly the guiding principles and vision, and the core services to be provided. Effort is also required to improve data quality.

14.111 The federal government has more than doubled its funding for the centres. The CBSC initiative is at a key juncture in its development. Industry Canada must decide quickly in conjunction with its partners what the long-term vision and

The CBSC initiative is at a key juncture in its development. Industry Canada must decide quickly in conjunction with its partners what the long-term vision and strategy should be.

strategy should be. The federal government can then in turn determine more easily its most effective contribution to integrating access to business services.

Conclusions

14.112 The programs we audited are all undergoing significant changes. Some are being terminated, some are not being renewed, others have been reorganized or are expanding. Together, these changes represent some of the challenges that government managers face.

14.113 While there will be no increases in the budgets of programs not being renewed, and no new financial commitments will be made under terminated programs, managers continue to have obligations. These include the immediate requirements to monitor ongoing assistance and to manage contributions that are repayable to the Crown. The types of programs we audited included some requirements for repayment that will extend beyond the term of the programs themselves. As we

noted, there is a risk that as resources are withdrawn, insufficient attention will be paid to these ongoing obligations.

14.114 Both the Canadian Tourism Commission and the Canada Business Service Centres are new initiatives relying on partnership arrangements to manage and deliver the programs. Both reflect a strong commitment to improve the programs, and present significant challenges to program managers. Both initiatives are in their early stages of development.

14.115 The Canadian Tourism Commission confirmed in its Charter its commitment to an effective accountability regime. At this early stage, it has the opportunity to build accountability considerations into all its arrangements and establish a sound basis for future accountability reporting. It is important for the Canada Business Service Centres to agree among themselves on a common vision and guiding principles that will form the basis for accounting for their performance and assessing their success.

The programs we audited are all undergoing significant changes. Together, these changes represent some of the challenges that government managers face.

Audit Team

Suko Bose
Frank Cotroneo
Raymond Foote
David Grant
Janet Hatt

For further information, please contact Gerry Chu, the responsible auditor.

Report of the Auditor General of Canada to the House of Commons – 1995

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Report of the
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Chapter 15
Public Works and Government Services Canada:
Northumberland Strait Crossing Project

October 1995

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October 1995

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Chapter 15

**Public Works and
Government Services Canada**

Northumberland Strait
Crossing Project

The audit work reported in this chapter was conducted in accordance with the legislative mandate, policies and practices of the Office of the Auditor General. These policies and practices embrace the standards recommended by the Public Sector Accounting and Auditing Board (PSAAB) of the Canadian Institute of Chartered Accountants.

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Assistant Auditor General: David Ratray
Responsible Auditor: Tony Brigandi

Public Works and Government Services Canada

Northumberland Strait Crossing Project

Main Points

15.1 The Northumberland Strait Crossing Project (fixed link) is a large, organizationally complex project with unique financing and project management features. Although cited as a private sector project, the government has significant contractual responsibilities and financial requirements associated with it.

15.2 The government's intention with the fixed link was to cap and then transfer the subsidy for the present ferry service to the private sector in return for the construction and operation of the bridge; the private sector was to assume most of the project risks. After 35 years, the government would stop the stream of payments to the bondholders, who financed the construction costs, and take over the bridge, facilities, and related operations.

15.3 Our findings on risk management indicate that the Northumberland Strait Crossing Project shows definite improvement over previous megaprojects, specifically in the protection of the Crown against potential cost overruns and withdrawal of support by private sector contractors, follow-up of environmental requirements, and provision of project information.

15.4 The procurement process was transparent and reasonable. Technical performance requirements were sorted out early in the process, and three contenders bid on the financial security package and price.

15.5 The annual transportation subsidy of \$41.9 million (1992 dollars indexed to inflation) that the government agreed to pay to finance the project is at the high end of the range of estimates for the present ferry subsidy.

15.6 The government played a critical role by enhancing the credit rating of the subsidy bonds to finance construction of the bridge.

15.7 The financing of the fixed link through a complex off-balance-sheet financing arrangement is a departure from the practice of direct borrowing for the acquisition of infrastructure assets. In present-value terms, we estimate that financing costs could have been reduced by about \$45 million had the government raised this debt through its own borrowing program. The government will need to weigh carefully the costs and benefits of using such off-balance-sheet financing arrangements for any future projects.

15.8 The security package the government demanded from the developer is comprehensive and should provide adequate protection to the Crown.

15.9 In our view, the advance income tax rulings that were provided to the consortium did not violate the intent of the *Income Tax Act*.

15.10 The \$661 million debt to private sector bondholders to finance the construction of the bridge does not appear on the balance sheet of the federal government. At the time of writing, the government was studying the appropriate accounting for and disclosure of the transaction. Preliminary indications are that the government intends to record its interest in this project in the 1994–1995 Public Accounts. The final results of this study, together with observations on it by the Auditor General, will be included in the 1994–95 Public Accounts to be tabled in Parliament later this year.

15.11 The requirements of the Environmental Assessment and Review Process were met for the fixed link. There is provision for ongoing environmental protection and treatment of emerging problems during construction and operation; and Public Works and Government Services Canada has established an effective oversight process.

Introduction

15.12 The idea of joining Prince Edward Island to the mainland by a fixed link has been a recurring theme in Canadian history for more than a century.

15.13 Since the admission of the Island into Canada's Confederation in 1873, the federal government has had a constitutional obligation to maintain a continuous connection between Prince Edward Island and the mainland. That obligation has been met over the years through the operation of a federally subsidized ferry service across the Northumberland Strait to New Brunswick.

15.14 On 7 October 1993, the government signed a series of agreements to build a 13-kilometre bridge at the narrowest part of the Strait, between Borden, P.E.I. and Cape Tormentine, N.B. The Northumberland Strait Bridge will be one of the longest continuous water-spanning bridges in the world. The bridge will have a design life of one hundred years without a major refit. See Exhibit 15.1 for highlights of the project and Exhibit 15.2 for the chronology of events.

15.15 Although the fixed link is often cited as a government/private sector partnership, this categorization is not accurate. The project is being undertaken by a private sector consortium, Strait Crossing Development Inc. The developer has contracted to design, construct, operate and maintain the fixed crossing for a 35-year period. Ownership will then be turned over to Canada. In the construction industry, this kind of development concept where the private sector participates in the development and operation of government infrastructure projects is called B-O-O-T: Build-Own-Operate-Transfer. The concept

is gaining interest and acceptance by governments faced with expanding infrastructure requirements and shrinking capital budgets. Any reference throughout this report to ownership by the developer refers to a leasehold interest.

15.16 Excluding the possibility of significant construction cost overruns, the initial construction funds (raised entirely through the government's credit rating) provide for a 10 percent contingency allowance, and also include sufficient capital to purchase major construction equipment, such as the floating crane. Moreover, despite the fact that the private sector consortium did not initially invest any funds to acquire a stake in the project, it can keep all proceeds from any sale of the equipment. In return, the government insisted on a comprehensive security package that would adequately protect the Crown's interests.

15.17 The federal government's principal financial contribution to the project is in the form of annual payments over 35 years, of \$41.9 million (1992 dollars, indexed to inflation) and beginning 31 May 1997. If the bridge is not operational at that time, the developer will fund the Cape Tormentine-Borden ferry service for up to three years. The government's intention is to replace the ferry service subsidy with the payments to the bondholders who financed the construction costs, and then to stop the stream of payments after 35 years.

15.18 The developer will also receive revenues from the bridge tolls. During the first year of operation, the toll will be the same as the cost of a 1992 ferry crossing, adjusted by the Consumer Price Index, during the five years to 1997. In subsequent years, tolls cannot be raised by an amount higher than three-quarters of the increase in the Consumer Price Index.

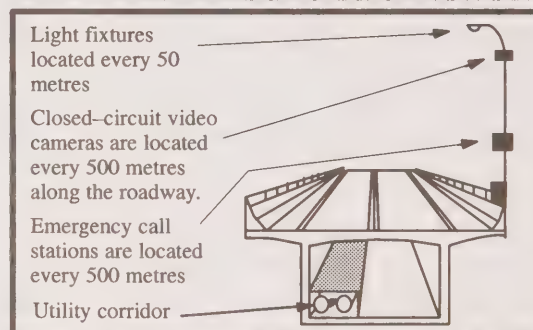
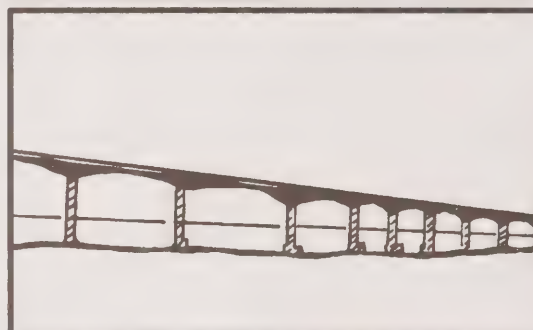
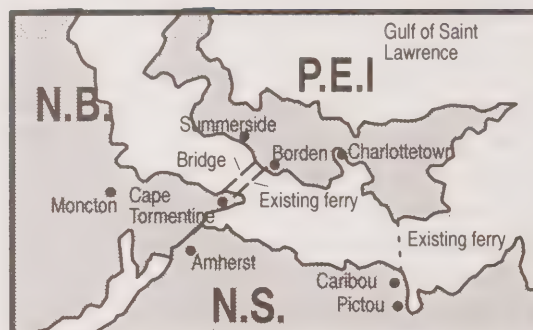
The federal government's principal financial contribution to the project is in the form of annual payments over 35 years, of \$41.9 million (1992 dollars, indexed to inflation) and beginning 31 May 1997.

Exhibit 15.1

Northumberland Strait
Crossing Project

FACTS AT A GLANCE:

Location	Between Borden, P.E.I. and Cape Tormentine, N.B.
Length	12.88 kilometres
Height	64 metres above water surface at its highest point in the central navigation channel; about 40 metres elsewhere
Special Equipment	A 100-metre-high floating crane (picture on right)
Piers	65 piers with 44 main piers at 250 metres apart, the remaining 21 piers spaced at an average of 86 metres
Construction Sites	Main fabrication plant at Borden (PEI) casts largest components; a smaller plant at Cape Tormentine (NB)
Completion	Expected in May 1997
Services	<ul style="list-style-type: none"> – Two-lane roadway and corridor – Toll plaza in Borden – Pedestrian and bicycle shuttle – 24-hour snow removal – 24-hour emergency equipment



**FLOATING
CRANE:**

The floating crane will be approximately 100 metres high. It will transport and position the bridge segments and supports.

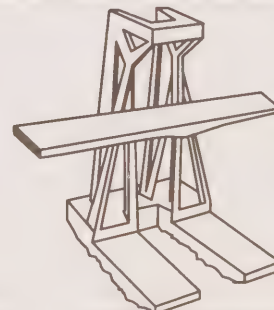


Exhibit 15.2

Chronology of the
Northumberland Strait
Crossing Project

1873	Prince Edward Island (P.E.I.) joined the Dominion of Canada with the promise of efficient steam communication year-round with the mainland. The first steamer made the connection between the mainland and P.E.I. across the Northumberland Strait in 1877 with a subsidy from Ottawa.
1917	The arrival of icebreaking ferries made it possible to have year-round rail/vehicle ferry services between P.E.I. and the mainland for the first time.
1956–1970	The idea of a fixed link surfaced and the Government of Canada decided to proceed with design for the construction of a combination of bridge, causeway and tunnel. However, the project was cancelled due to high costs. Instead, the focus was on new improved ferries that were put into service in 1970.
1985	The government received three unsolicited proposals from private industry for a bridge, an electric rail tunnel and a rail tunnel as an expression of interest to construct a fixed link; industry offered to finance the scheme.
1987	Fifteen consultants were commissioned to conduct 10 studies to determine the economic, structural and financial viability of a fixed link. Twelve companies showed interest in the project and seven passed the pre-qualifying tests.
1988	A January 1988 plebiscite was held in P.E.I. and 60 percent of the residents voted in favour of a fixed link.
	In March, the seven pre-qualified companies were invited to submit proposals based on non-financial requirements such as technical criteria. It was announced in September that three developers, who proposed bridges, had met all the requirements.
1989	Due to high level of public concern, an Environmental Assessment Review Panel was appointed to review the environmental impacts of the proposed bridge.
1990	In September, the Panel recommended that the project not proceed.
1991	The government commissioned a Committee of ice experts to review the impact of the bridge during the melting of spring ice in the Strait. The ice experts concluded that a bridge that would meet the criteria for ice delay established by the Panel could be constructed across the Strait. The government then invited the three qualified developers to submit their environmental and financial proposals for evaluation.
1992	In April, the three developers submitted financial plans in response to the government's bid requirements on the security package. Separate pricing bids were also required for the public tender opening. During the next month, the pricing bids were opened in public; however, none of the submissions fully complied with the proposal call.
	In July, the Minister of Public Works announced a new process; discussions would be initiated with the lowest bidder, Strait Crossing Inc.
	In December, the Minister of Finance announced that the government had decided to enter into negotiations with Strait Crossing Inc. for its proposal to build a bridge. The federal government and the provinces of Prince Edward Island and New Brunswick signed a federal-provincial agreement, which dealt with certain project requirements and financial arrangements. The Friends of the Island (FOTI) filed a court challenge against the government's response to the Federal Environmental Assessment Review Office panel.
1993	In March, Madame Justice Reed ruled in favour of FOTI, causing the government to undertake certain actions, which it did over the next year, e.g. specific environmental assessment and an amendment to the Terms of Union with P.E.I.
	In the Spring, the Province of Prince Edward Island passed an amendment to the Terms of Union as signalled by Madame Justice Reed's earlier decision.
	In June, the <i>Northumberland Strait Crossing Act</i> was passed by Parliament, authorizing the government to enter into agreements related to the fixed link. In August, Justice Cullen ruled that the government had more than adequately responded to Madame Justice Reed's decision in respect of a specific environmental assessment of the developer's proposed structure. This ruling cleared the way for the signing of an agreement between the developer and the government.
	In October, agreements were signed to build the bridge. The following month, the developer started construction of the fabrication yard in Borden, P.E.I.

**Exhibit 15.2
(cont'd)**

**Chronology of the
Northumberland Strait
Crossing Project**

1994	<p>Between February and April, Parliament amended the Constitution to allow a fixed crossing to replace steam service.</p> <p>In October, the fabrication yards in Borden, P.E.I. and Bayfield, N.B. were effectively completed and work began on the building of bridge elements.</p> <p>In December, the first seven near shore piers on the P.E.I. side were completed, and put into place.</p>
1995	<p>In April, work began on the near shore piers on the N.B. side and all production lines were under way.</p> <p>In June, the FOTI appeal of Justice Cullen's ruling was heard and dismissed.</p> <p>In July, the major piece of construction equipment (the heavy lift marine erection vessel, the Svanen) arrived from France where it had been modified for increased lift capacity.</p>

**Financial and
organizational
arrangements for the
project are complex.**

15.19 In addition to the annual subsidy payments, other direct costs of the federal government include: \$46.0 million for project management; \$41 million (1992 dollars) for highway upgrading in Prince Edward Island and New Brunswick; \$15 million (1992 dollars) for regional redevelopment; and an amount yet to be settled for ferry workers' compensation.

15.20 Financial and organizational arrangements for the project are complex, as can be seen in the deal structure illustrated in Exhibit 15.3. Exhibit 15.4 describes the flow of funds for the transportation subsidy and construction phase of the project.

15.21 Our intention in reviewing the fixed link project was to provide an early warning to Parliament about any significant potential problems and to encourage any improvements that could be made. We will continue to monitor the project, specifically environmental issues and the overall results of the bridge's construction.

Important Features of the Project

15.22 From the government's viewpoint, there were essentially six important features of this project:

- **Performance requirements.** One of the most difficult tasks was to get the performance characteristics right. It was also considered essential to deal first with performance requirements (design; engineering; operation and maintenance; environmental; and management) and to call for sealed bids only after the last round of bidders had met the criteria for each of these requirements.

- **Competition.** The government's intention was to ensure a fair competition, which in the final bidding stage included at least three developers. It also intended to keep the process "meddle-proof" against all the parties (bidders, government officials and politicians). Running this type of competition process was designed to ensure that the government obtained a good deal and a project that took due account of the environment. In particular, the government wanted the finalists to compete on price.

- **Irrevocable subsidy and a set date.** The annual subsidy payment was to comply with a contractual commitment authorized by a specific Act of Parliament. This irrevocable commitment to pay the subsidy on an established date, whether or not the bridge was complete, was considered essential to obtain private sector financing.

- **Security package.** The government demanded from the developer a

Exhibit 15.3

Deal Structure for the
Northumberland Strait
Crossing Project

DEAL STRUCTURE

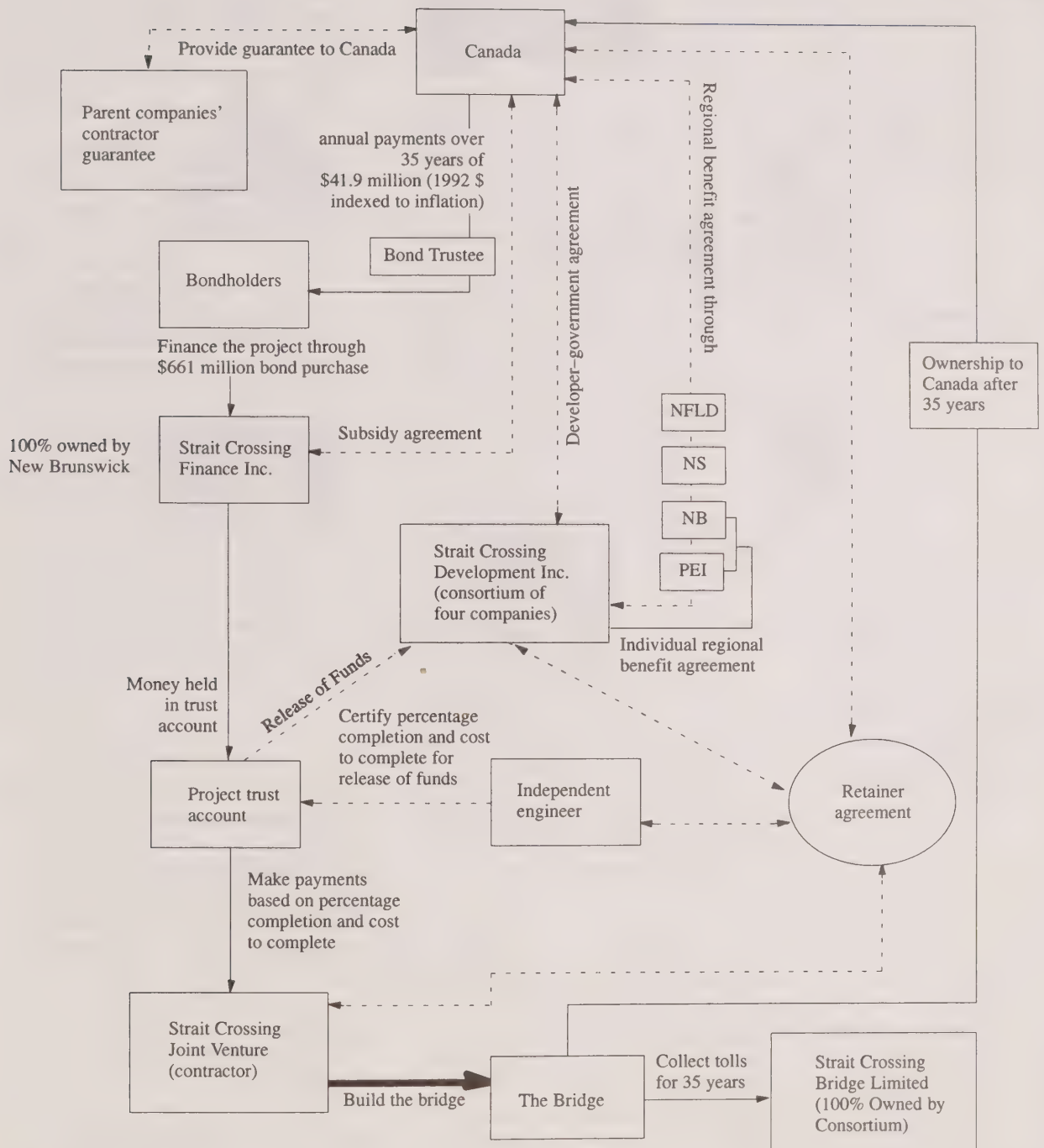
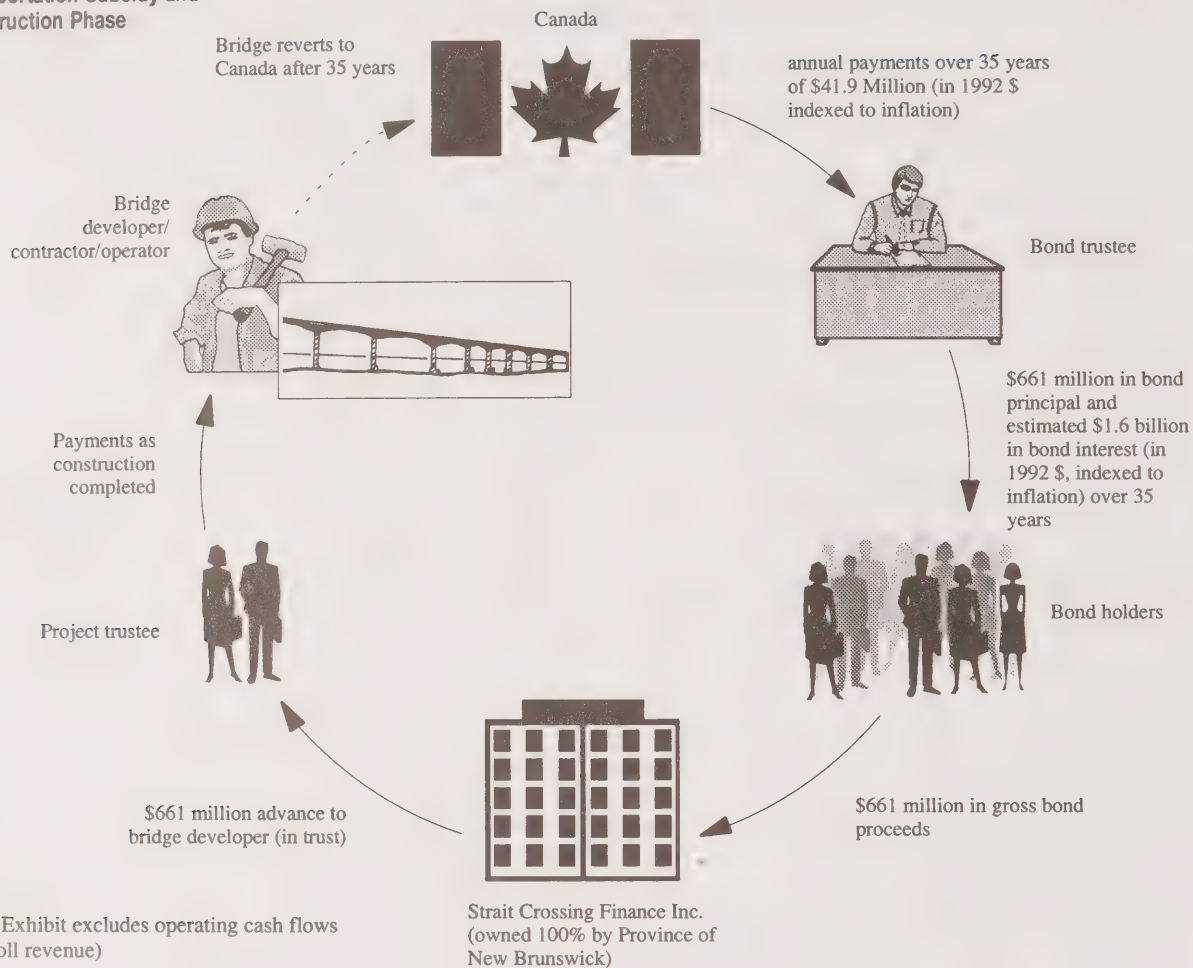


Exhibit 15.4

Flow of Funds: The Transportation Subsidy and Construction Phase



comprehensive security package in return for the government's irrevocable commitment to make the subsidy payments.

- **Single developer concept.** The winning developer had to integrate design, financing and construction, and then maintain and operate the bridge for 35 years under an approved environmental management plan. These features would help force the developer to optimize the life cycle of the bridge and thereby meet the "prudent owner test" (i.e. builder and operator represented by the same parties).

- **Environmental protection.** This was a key requirement from the outset. The Environmental Assessment and Review Process (EARP) was to be followed and there was to be extensive public consultation to make it an "open process".

Audit Scope and Objectives

15.23 Our examination assessed whether there was due regard to economy in the planning and the implementation

phases (to July 1995) of the fixed link. We also evaluated the general project monitoring and reporting framework.

15.24 We conducted our audit by reviewing project documentation and reports; examining files; interviewing personnel; and visiting the construction sites in Prince Edward Island and New Brunswick.

15.25 We concentrated on matters related to procurement, financial analyses, taxation, environment and reporting to Parliament. Specifically, we set out to determine whether:

- the obligations of the federal government had been identified clearly in the agreements with the developer and other participants;
- the procurement process had been managed properly;
- the security package and other measures being implemented provided reasonable assurance that the interests of the Crown (and the Canadian taxpayer) were protected adequately;
- environmental requirements were being met; and
- stewardship, financial, and operational information on the project was monitored and provided to Parliament appropriately.

15.26 We did not examine financial information related to the 35-year bridge operating period. Nor did we examine certain programs or activities covered by the project agreements. They included fishermen's compensation; regional benefits; the federal-provincial agreement; and the activities of third-party organizations.

15.27 We did not audit the engineering aspects of the bridge design and construction; we are not expressing an

opinion on the engineering soundness of the fixed link. This is the responsibility of the independent engineer, as described in the agreements.

Observations and Conclusions

Experience with Past Megaprojects

15.28 In 1992, we examined and reported on certain energy megaprojects that were being assisted and funded by Natural Resources Canada. We noted fundamental weaknesses in: the clarity of project objectives; compliance with follow-up of environmental requirements; reporting of project information to Parliament; and involvement by the central agencies of government. We also noted our concerns about risk management, particularly in the areas of cost overruns and withdrawal of support by private sector contractors.

15.29 Our 1994 follow-up revealed that encouraging progress had been made, specifically in the areas of environmental compliance and reporting to Parliament. In addition, Treasury Board had issued a policy to aid departments in managing future megaprojects. At a minimum, we expected to find this progress reflected in the fixed link project.

15.30 In the areas related to risk management, our findings indicate that the Northumberland Strait Crossing Project shows definite improvement over previous megaprojects, specifically as it relates to the protection of the Crown against potential cost overruns and withdrawal of support by private sector contractors, follow-up of environmental requirements, and the provision of project information.

In the areas related to risk management, our findings indicate that the Northumberland Strait Crossing Project shows definite improvement over previous megaprojects.



The self-propelled marine crane "Svanen" is shown here carrying a pier base weighing about 4,000 tons. This vessel is equipped with a computerized control system which uses satellite technology to precisely position bridge components. The "Svanen" is 100 metres in height, 94 metres in length and has a lifting capacity greater than 8,000 metric tonnes.

The "Svanen" is shown here being towed on a submersible barge into Prince Edward Island from France where it was refitted specifically for the Northumberland Strait Crossing Project.



One of two Huisman sliders is seen here in action at the Prince Edward Island Staging Facility. These machines are used to transport bridge components from station to station, moving over a network of track connecting the bridge component assembly lines to the marine jetty where the "Svanen" crane is moored.

View of the bridge pier production line at the Prince Edward Island Staging Facility, which produces the marine-related components for the bridge. Land-related components are produced at the New Brunswick Staging Facility.



View of partially-completed bridge segments from the Prince Edward Island side. The device on top is a launching truss, an Italian-made gantry crane which is used to construct the bridge in areas difficult to access by marine construction equipment. The components weighing up to 95 tons are lifted, transported through the interior of the crane, and positioned in place.

View of the main girder production line at the Prince Edward Island Staging Facility.



The Procurement Process

15.31 In 1985–86, the government received three unsolicited proposals from private industry as an expression of interest to construct a fixed link to Prince Edward Island. The proposals included two bridges and a rail tunnel; private industry also offered to finance the scheme.

15.32 A procurement process for the fixed link was then carried out in three distinct phases:

- technical performance requirements: March 1988 to September 1988;
- financial security and pricing: September 1988 to July 1992;
- negotiations with the lowest bidder: July 1992 to October 1993

Technical performance requirements: March 1988 to September 1988

15.33 In May 1987, Public Works and Government Services Canada called for further expressions of interest in the project. Twelve companies showed interest; seven of them were prequalified in the fall of 1987 and were later invited to submit proposals based on the initial proposal call, issued in March 1988.

15.34 On 13 June 1988, six consortia submitted seven proposals: six for a bridge, one for a tunnel. The proposals were evaluated in the summer of 1988 in relation to four technical areas: engineering, environment, regional benefits, and management. In addition to the technical areas of evaluation, there was a financial capability evaluation.

15.35 In September, three proposals (for bridges) met the screening requirements and were carried on to the financial security and pricing stage.

Financial security and pricing: September 1988 to July 1992

15.36 In January 1989, the government announced the appointment of a panel to review the environmental impact of the project. (See paragraphs 15.84 and 15.85 for details.) Three years later, in January 1992, the Minister of Public Works and Government Services announced that the three bridge proposals had met all environmental requirements, including those in the panel's report. The project could now proceed to the financial security and pricing stage.

15.37 On 27 May 1992, the three bids were opened publicly. Each represented the average annual payment required over a period of 35 years to retire the bonds issued to finance the construction of the bridge (see paragraph 15.57). These bids were for \$40.6 million, \$46.2 million and \$64.2 million, in 1992 dollars. A subsequent review of the three submissions showed that none of them complied fully with the detailed financial terms of the proposal call. This effectively ended the competitive phase of the process.

15.38 In July 1992, the Minister of Public Works and Government Services, with Cabinet approval, announced that discussions would be initiated with the lowest bidder, Strait Crossing Inc. This decision was based solely on price, as all the bidders had already met the performance requirements.

The negotiation period: July 1992 to October 1993

15.39 The negotiating period was protracted. Negotiations were based on the terms of the government's proposal call of May 1992. By October 1992 it became clear to the developer and to the government that all of the necessary steps to achieve closing could not be completed

A procurement process for the fixed link was then carried out in three distinct phases:

- technical performance requirements
- financial security and pricing
- negotiations with the lowest bidder.

in time for the planned 1993 full season of construction, on which the developer had based his original bid. The developer advised the government that the delay would result in both additional costs and a delay in the original estimated completion date, but assured the government that the final agreed price could still be within the 1988 ceiling of \$35 million a year (about \$42 million in 1992 dollars). In October 1993 the developer and the government agreed on annual payments of \$41.9 million in 1992 dollars.

15.40 The negotiators dealt with the following important and difficult issues:

- **Legislation.** Parliament passed the *Northumberland Strait Crossing Act* in 1993 and the government was preparing a constitutional amendment that was to be passed in 1994. Prince Edward Island in 1993 was preparing an amendment to its Terms of Union. New Brunswick established Strait Crossing Finance Inc. that same year.

- **Litigation on environmental issues.** Litigation continued throughout the period from December 1992, when a claim was filed in federal court, to the decision in August 1993 (see paragraphs 15.92 to 15.94).

15.41 These first two issues effectively blocked any possible signing of agreements, as the government, contractor and third parties needed both legislative assurance of the subsidy payment and a clear decision from the courts on the environmental issues.

- **Security package.** The government was attempting to transfer as much commercial risk as possible to the private sector; as a result, the security package (particularly the *force majeure* clauses and corporate guarantees) generated long debate among the parties and their advisors.

- **Engineering and the independent engineer's design check.** The government was able to conclude an Interim Engineering Design Agreement with the developer. This allowed engineering design and costing to advance to the stage where the independent engineer could review and check the developer's design and cost estimates, leading to his September 1993 report. The report confirmed that the fixed link could be built within the developer's cost estimates, including a 10 percent contingency allowance. This was an important part of the closing documents.

15.42 There were also matters that were basically consortium issues, but at times they required extensive involvement of officials from various government departments:

- **Organization** of the consortium.
- **Taxation**, including income taxes and sales and excise taxes.
- **Financing**, including market analyses and preparation for the eventual issue of real return bonds.

15.43 According to departmental officials, the months taken to perform the quality engineering work and market the real return bonds effectively brought down the cost of constructing and financing the bridge. Autumn of 1993 proved to be a good time to market the bonds, as interest rates were lower than in the previous autumn. In May 1993, the government and developer agreed on a "term sheet", the basis for the agreements that were struck. From that time, there followed a period of drafting agreements and negotiating among the parties and their advisors to produce the closing documents in October 1993.

The procurement process was transparent and reasonable

15.44 Based on our review, we concluded that the procurement process

We concluded that the procurement process was transparent and reasonable.

The project was not “sold” as a regional development project, in competition, for example, with other potential regional megaprojects.

The driving force behind the fixed link was the constitutional obligation to Prince Edward Island.

followed by the government appeared transparent and reasonable. The government took steps to ensure that:

- technical performance requirements were sorted out in step one of the process;
- at least three contenders bid on the financial security package and price; and
- the project team and negotiating team had adequate resources, including well-qualified external specialists, throughout the process.

Economic and Financial Analyses

Economic analyses sought the least-cost transportation option

15.45 The economic studies preceding the fixed link project were funnelled through an iterative process of tabling the findings, reviewing the methodologies and logic of the approach and amending, when necessary, both the database and techniques of analysis. The views of the major critics of the studies were heard in public forums, including parliamentary committee hearings, and their concerns were generally addressed in the updated versions of the benefit-cost reviews.

15.46 The starting point for the economic analyses was the existing ferry service at Borden. The benefits associated with the ferry were taken as given, and only supplemental benefits provided by the new bridge or tunnel options were calculated. This approach reoriented the benefit-cost technique to a cost-effectiveness review, that is, what is the least-cost transportation option? The ranking of the options does not change under this approach so long as the original assumption holds that every option delivers at least the same economic benefits as the existing ferry service.

15.47 The project was not “sold” as a regional development project, in

competition, for example, with other potential regional megaprojects. The driving force behind the fixed link was the constitutional obligation to Prince Edward Island. The prime constraint in delivering this project was a financial one: to provide a fixed link within the stream of subsidy payments made to the existing ferry service at Borden. In other words, the intent was to establish a cap on the ferry service subsidy and use it to put a fixed link in place.

Transportation subsidy was the basis for bids

15.48 In 1987, the federal government stated that it would seriously consider a fixed crossing between Prince Edward Island and the mainland, provided that its cost did not exceed the current subsidy for the Borden-Tormentine ferry service and estimated subsidies until the year 2032. In 1988, Transport Canada estimated the annual subsidy of the ferry service over that period to be \$35.3 million, expressed in 1988 dollars. Exhibit 15.5 (a) summarizes the Department’s estimates.

15.49 The government’s estimate of the annual transportation subsidy was prepared by Transport Canada, which has responsibility for all Government of Canada ferry services. Transport prepared the estimate from information provided by Marine Atlantic Inc. (Marine Atlantic), a Crown corporation that operates ferries throughout the Atlantic region and also reports to the Minister of Transport.

15.50 We reviewed the subsidy estimates and related analyses prepared by Transport Canada, Marine Atlantic and third parties. We discussed the estimates with officials from Transport and Marine Atlantic.

15.51 In addition, Marine Atlantic prepared its own estimate and another was prepared by a private sector company on

Exhibit 15.5(a)

The Transportation Subsidy

Estimated Annual Cost of the Ferry Service in millions of \$ (1988 dollars)			
Description	Cash Flow over 35 years	Net present value (5%, end of period)	Annualized amount
a) Direct operating and maintenance cost	1,510.6	673.7	41.1
b) 50% of the estimated allocated overhead cost	77.0	36.0	2.2
c) Minor and major capital expenditures	310.2	163.8	10.0
Subtotal	1,897.8	873.5	53.3
d) Less: tolls and other revenue	700.2	294.7	18.0
Net amount	1,197.6	578.8	35.3

Source: Department of
Transport 1988 Estimate

Exhibit 15.5 (b)

Analysis of Transportation
Subsidy Estimates

Summary of the Estimates of the Annual Cost of the Ferry Service Prepared by the Government and Third Parties in millions of \$ (1988 dollars)					
Description	Government			Marine Atlantic Inc.	Private Sector
Year Prepared	1988	1992	1993	1990	1991
a) Direct operating and maintenance cost	41.1	37.9	39.2	36.4	40.5
b) 50% of the estimated allocated overhead cost	2.2	1.8	2.4	(1) 2.2	2.2
c) Minor and major capital expenditures	10.0	14.6	13.9	7.0	12.6
Subtotal	53.3	54.3	55.5	43.4	55.3
d) Less: tolls and other revenue	18.0	22.3	22.0	18.9	18.4
Net amount	35.3	32.0	33.5	26.7	36.9

(1) This amount was not included in the estimate

The Government of Canada's obligation to pay the bondholders is unconditional and irrevocable, even if the bridge is not completed on time or not constructed at all.

behalf of the three bidders for the contract. As Exhibit 15.5 (b) indicates, estimates of the transportation subsidy can vary considerably, mainly due to various assumptions about factors such as future traffic and tolls; productivity gains and wage levels; ship maintenance and acquisition plans; and changes in ship technology and safety requirements. In particular, these estimates assume that no future changes will be made in the government's current policy to use domestic shipyards for procurement or refit of its vessels. We attempted to ensure that all of the estimates were stated in comparable terms for our purpose of analyzing whether the transportation subsidy figure was reasonable.

15.52 In 1988, the federal government informed the potential developers of the fixed link that its annual cost of subsidizing the ferry service ranged from \$30 million to \$35 million in 1988 dollars. Later, in June 1991, it informed them that the annual subsidy amount used for bidding purposes must not exceed a ceiling of \$35.3 million. The aim was to obtain from the bidders their competitive pricing of the project having taken into account the ceiling amount of the annual subsidy.

15.53 In September 1991 the Atlantic Provinces Economic Council, on behalf of Public Works and Government Services Canada, carried out a comparative analysis of the transportation subsidy estimates by the government in 1988, by Marine Atlantic, and by the private sector. Its summary concluded that a range of \$30 million to \$38.5 (1988 dollars) was "suggested as encompassing the acceptable amount of the annual subsidy."

15.54 Our analysis of the estimates shown in Exhibit 15.5 (b) and stated in terms comparable to Transport Canada's assumptions, indicated a range of

approximately \$26.7 million to \$36.9 million per year. The 1988 estimate by Transport Canada is in the upper third of that range. The government concluded that its original estimate of \$35.3 million (about \$42 million in 1992 dollars) was reasonable and that there was no need to change it, in view of the fact that it would be subject to the competitive procurement process.

Financing arrangements were complex and a departure from usual practice

15.55 The government subsidy authorized through the *Northumberland Strait Crossing Act* is in the form of annual payments over 35 years commencing on an agreed "date certain", 31 May 1997. Each payment will be indexed in accordance with the terms of the subsidy agreement to reflect increases in the Consumer Price Index between 31 May 1992 and the date of payment. The Government of Canada's obligation to pay the bondholders is unconditional and irrevocable, even if the bridge is not completed on time or not constructed at all.

15.56 Prior to the commencement of the bidding process, the Government of Canada sought external advice about the viability and cost of raising funds from the private sector based on the parameters noted. Although real return bonds were relatively rare in Canadian markets, the advice (which was made available to all prospective bidders) concluded that the most efficient form of financing would be a real rate bond. The government was advised that there was a viable market for such an instrument, especially from pension funds and other investors requiring an index-linked flow of funds to offset index-linked liabilities.

15.57 Based on these principles, Strait Crossing Finance Inc. on 7 October 1993 raised approximately \$661 million

through an issue of indexed, fully amortizing bonds yielding a semi-annual rate of 4.5 percent. The bonds were secured by an irrevocable assignment to Strait Crossing Finance Inc. of the rights to receive the future stream of subsidy payments from the government. As illustrated in Exhibit 15.3, the cash that was generated was subsequently advanced, in trust, to the bridge developer to finance up-front construction costs.

15.58 The actual cash flows under the subsidy agreement cannot be predicted with certainty, as they are indexed to future inflation rates. By issuing a bond with identical indexation features, Strait Crossing Finance Inc. eliminated any exposure to future inflation rates. Under the subsidy agreement, the scheduled payments that the government will make to the bondholders will exactly equal, in both timing and amount, the scheduled repayments of principal and interest on the bonds.

15.59 The future stream of payments was authorized through the passing of the *Northumberland Strait Crossing Act*. This was considered to be necessary because, under the *Financial Administration Act*, the payment of any money pursuant to a subsidy agreement is subject to there being an annual parliamentary appropriation for that purpose. The passing of the Act was necessary to guarantee to the bondholders that authority was in place for them to receive a future stream of bond repayments, rather than relying on yearly appropriations. To the bondholders, the passing of this Act significantly enhanced the security position behind the bonds. However, the legal form of this transaction is that the bonds are not obligations of, or guaranteed by, the Government of Canada.

15.60 It is evident from advice received by the government and feedback from potential institutional lenders that the government's involvement in this financing transaction was critical. Potential investors were more inclined to purchase the bonds given Canada's unconditional commitment to provide a fully indexed stream of payments on due dates.

15.61 The bond issuers have gone through many complexities to achieve an end result that is similar, in many respects, to what would have been achieved had the Government of Canada issued debt. For example, the issuing prospectus refers to the securities as "bonds" and states that "the obligation of the Government of Canada to pay the government subsidy will be unconditional and irrevocable." Moreover, every effort will be made to ensure that the payments will not be subject to any third-party claims other than those of the bondholders.

15.62 The financing of the fixed link through these arrangements is a departure from the practice of direct borrowing for the acquisition of infrastructure assets. In present-value terms, we estimate that financing costs could have been reduced by about \$45 million had the government raised this debt through its own borrowing program. At the time of issue of the fully indexed amortizing bonds, Canada's marketable real rate bonds were being traded on a 4.10 percent yield basis — 40 basis points below the yield available on the Strait Crossing Finance Inc. bonds. This represents about \$38 million in additional costs. Furthermore, regular commissions on marketable issues of the Government of Canada's real rate bond issues were 0.6 percent compared with the 1.75 percent paid for the Strait Crossing Finance Inc. issue, with the incremental

In present-value terms, we estimate that financing costs could have been reduced by about \$45 million had the government raised this debt through its own borrowing program.

The government will need to weigh carefully the costs and benefits of using such complex off-balance sheet financing arrangements for any future projects.

commission cost approximating \$7 million.

15.63 The government will need to weigh carefully the costs and benefits of using such complex off-balance sheet financing arrangements for any future projects.

Security package demanded by the government was comprehensive

15.64 It was the government's intention to obtain adequate security from the contractor to manage all or most of the significant risks in this project, such as cost overruns, bankruptcy, abandonment, claims by third parties, labour strikes or disruptions, material defects, and project delays. In return, the government committed to irrevocable payments beginning at a certain date and continuing over 35 years, whether or not the bridge is completed by the end of that period. This commitment was also necessary to satisfy the underwriters who issued the bonds to finance the project.

15.65 The principal elements of the security package are the following (see Exhibit 15.6 for a description of each element and its purpose):

- construction trust funds and a cost-to-complete system, administered by an independent engineer;
- \$ 200 million performance bond;
- \$ 74 million letter of credit;
- \$ 20 million payment bond for labour and materials;
- guarantees jointly and severally by the parent companies of the developer consortium;
- a comprehensive insurance package;
- \$10 million obligation for fisheries compensation;

- process to reimburse ferry costs for completion delays of up to three years, subject to an annual maximum of \$30 million;

- fixed and specific security interests in critical project assets; and

- floating charge of \$1.5 billion.

15.66 The developer bears all risks for the project with the exception of:

- **project risk events** beyond the \$200 million covered by insurance. These are defined as acts of the Queen's enemies, nuclear events, government action, environmental injunction, and sabotage and terrorism, for which the government will bear the risks.

- **project delay events**, which are defined as catastrophic events, third-party strikes and labour disputes, and disposal of contaminated material.

15.67 **Project delay events** will result in an extension of the completion date and, as a consequence, an extension of the period within which the developer must reimburse the government for costs associated with continuing operation of the ferry.

15.68 Since the government's liability is limited to the annual subsidy payments, and not to the construction cost, cost overruns are the responsibility of the contractor. The cost-to-complete system also provides an extra level of assurance against cost overruns. The principal element of the cost-to-complete system is the work breakdown schedule submitted by the consortium, which determines the amount to be paid for work properly completed by the developer and accepted by the independent engineer. Therefore, the developer can never be paid more than the original proposed price for a work unit to be done. In addition, if the independent engineer determines, through his monthly monitoring and estimate of cost to complete, that his estimate of cost to

The Government Security Package

DESCRIPTION	PURPOSE
Cost to complete control system, using the services of an independent engineer and an independently managed trust account.	To ensure that there are enough funds available in the trust account to complete construction, based on a work breakdown construction schedule submitted by the consortium and reviewed by the independent engineer.
\$200 million performance bond.	To provide security for completion of construction. Will remain in place until the date of substantial completion.
Letter of credit (\$73,900,000).	Part of protection required by the Crown. Can be drawn on in the event that performance defaults exceed the \$200 million limit on the performance bond. In effect until 31 October 1997.
\$20 million labour and materials payment bond.	To protect the Crown from potential claims made by materials suppliers and subcontractors. To remain in place until two years after date of substantial completion.
\$5 million compliance assurance/regional benefits.	To provide assurance that terms and conditions of the regional benefit agreement and other project agreements and regional benefit targets have been respected.
\$35 million compliance bond.	Covers defects in bridge construction. To replace performance bond on date of substantial completion and remain in place for two years.
\$5 million interim maintenance assurance provision obligation.	Covers any maintenance that is required in the first years after construction. To remain in place for three years after date of substantial completion. Covered under the parent company guarantee.
\$10 million fisheries compensation obligation.	Protection against damage, disturbance or disruption to the fisheries in the Northumberland Strait arising from the construction of the project. Obligation in effect until two years after the date of substantial completion.
Ferry cost reimbursement obligation.	To reimburse the Crown for costs of operating the ferry service for up to three years from 31 May 1997 to the date of substantial completion, with a maximum of \$30 million per year.
General bridge defect warranty covered by unlimited joint and several parent company guarantee for 10 years.	To provide protection to the Crown for direct defects relating to the bridge where notice received within 10 years of the date of substantial completion.
Parent companies jointly and severally guarantee performance of contractor and the Crown.	Joint and several unlimited guarantee with respect to the contractor's obligations. Guarantees developer's obligations to the Crown for \$25 million for developer obligations to direct damages not otherwise covered by contractor obligations guarantee, for two years subsequent to the date of substantial completion. Also for \$75 million in respect of unspecified consequential damages for 10 years subsequent to the date of substantial completion.
Comprehensive insurance package, monitored by an outside insurance consultant, reporting to the government.	To provide adequate insurance to protect the Crown's interest both during the construction and operating periods.
Fixed and specific security interests in critical project assets, and in the project trust account.	To protect the Crown's interests, the security trustee holds first fixed and specific security interests in and over all of the developer's right, title and interest in the lease, leased lands, the licence, the licensed lands, all critical assets, all material project assets, all developer subcontracts and critical marine assets. Such security interests will be released on construction assets within 30 days following the date of substantial completion and on the bridge operating assets within 30 days following the reversion date. Any ferry cost reimbursement obligation must be settled prior to such release.
Floating charge of \$1.5 billion.	To secure the Crown's interests in the developer's assets not covered under the fixed and specific security interests.

complete the major work items exceeds the available funds in the trust account, a withholding amount must be left in the trust account. This trust account holds the proceeds of the bond issue, which, together with accumulated interest, should be sufficient to cover the construction cost of the bridge.

15.69 The government used the services of consultants for the bonding and insurance requirements to assist in protecting its interests. The insurance package and bond instruments were put into place based on their advice.

15.70 The security package, in its entirety, appears comprehensive and should provide adequate protection to the Crown.

15.71 During our examination it was revealed that the parent company of one of the major consortium owners is in financial difficulty. This raises concerns about the financial strength of that parent's corporate guarantee. However, project officials are monitoring this situation carefully and have stated, based on legal advice they have received, that the current security package and the structure of the consortium protects the construction project adequately.

Advance income tax rulings were consistent with intent of the *Income Tax Act*

15.72 We reviewed Revenue Canada's advance income tax rulings dated 28 September and 5 October 1993. The rulings were provided at the request of the consortium prior to the final agreements, and are included in the closing documents.

15.73 Our objective was to determine whether the rulings provided to the

consortium were issued in accordance with the intent of the *Income Tax Act*.

15.74 The structure, while complicated, had bona fide business reasons, which include insulating the annual subsidy payments from claims by creditors and enabling the federal government to avoid recording the subsidy on its balance sheet. As a result, the company receiving the annual subsidy payments, Strait Crossing Finance Inc., is owned by the Province of New Brunswick.

15.75 Although its ownership by New Brunswick means that Strait Crossing Finance Inc. is not subject to income tax, it should earn no income. The annual subsidy is received free of tax by Strait Crossing Finance Inc. but when it is passed on to Strait Crossing Development Inc., the owner of the bridge (through a leasehold interest), it is included in the latter's income. This approach may result in income being realized immediately.

15.76 The bridge and facilities will be owned by Strait Crossing Development Inc., but a consortium (Strait Crossing Joint Venture) made up of the same owners will build the bridge. On the assumption that the consortium will earn a profit on construction, this profit will be included in its income and will not be reduced by depreciation on the bridge.

15.77 In our view, the advance income tax rulings dated 28 September and 5 October 1993 and provided to the consortium did not violate the intent of the *Income Tax Act*.

15.78 The amount of income taxes, if any, that the project will yield Canada is not known. This is not unique to this project. We would expect the private sector participants to structure their affairs to minimize taxes.

The security package, in its entirety, appears comprehensive and should provide adequate protection to the Crown.

In our view, the advance income tax rulings dated 28 September and 5 October 1993 and provided to the consortium did not violate the intent of the *Income Tax Act*.

Environmental Assessment and Review

15.79 Our review of the environmental aspects of the project was guided by two questions: Did Public Works and Government Services Canada follow the Environmental Assessment and Review Process? Is the bridge being constructed with due regard to the environment and how will it be operated?

15.80 We did not audit the engineering aspects of the bridge design and our observations and conclusions do not take these into account.

Initial environmental evaluation foresaw no significant negative effects

15.81 Public Works and Government Services Canada required that the project have minimal impact on the environment, in view of the perceived environmental sensitivity of the proposed fixed link and the associated public concerns. The Department therefore sought the advice of the Federal Environmental Assessment Review Office in order to meet the requirements of the *Environmental Assessment and Review Process Guidelines Order*.

15.82 The Department had seven proposals (for six bridges and a tunnel) to review in 1987. It decided, in consultation with the Federal Environmental Assessment Review Office, to subject the fixed link concept to the Environmental Assessment and Review Process.

15.83 The evaluation report, produced in 1988, concluded that the predicted environmental impacts were not significant at the concept level if the developers' design assumptions were valid. However, it also stated that the developers must address concerns about ice that the design document had raised.

Environmental Assessment Review Panel recommended against proceeding

15.84 Although the Department had prepared a detailed evaluation, the communities affected and local fishermen continued to express concerns about the fixed link. Consequently, the Minister of Public Works and Government Services Canada asked the Minister of Environment in 1989 to have the project reviewed by an independent panel.

15.85 In its 1990 report, the panel concluded that the proposed bridge concept involved an unacceptable risk of harmful effects and recommended that the project not proceed. The panel's primary concern was the possibility of a bridge-induced ice delay of one to two weeks and the resulting negative impact on marine life, the fishery and the coastal agricultural micro climate.

Government decided to proceed but provided guidelines for future action

15.86 In its November 1990 response to the panel's report, the government concluded that the specific environmental criteria set out in the report would still allow the project to go ahead. However, the government cited four guidelines for further action:

- The bridge concept design must not result in ice delays beyond a maximum of two days. The Minister of Environment appointed a committee of independent experts to address the ice issue.
- An Environmental Management Plan must be prepared for the 35-year period of the project.
- Compensation must be provided for fishermen and displaced ferry workers.
- A federal-provincial agreement was required to ensure co-ordination of activities.

15.87 Action in these areas generated additional criteria that developers had to

Public Works and Government Services Canada required that the project have minimal impact on the environment, in view of the perceived environmental sensitivity of the proposed fixed link and the associated public concerns.

The developer's Environmental Management Plan involved extensive public consultation and required the approval of the project's Environment Committee.

meet before they could proceed to the next stage in the bidding process.

Bridge designs satisfied concerns about ice

15.88 The ice committee reported in December 1991. Based on its analyses of computer models of ice conditions and the bridge designs of the developers remaining in the bidding process, the committee concluded that the three designs would meet the ice delay criterion recommended by the Environmental Assessment Review Panel. Subsequently, the project's Environment Committee concluded that the three developers had the capability to construct a bridge without creating significant or unmanageable impacts on the biophysical environment. The Committee recommended, therefore, that the government proceed with the bidding process.

15.89 Strait Crossing Development Inc. (formerly Strait Crossing Inc.) was subsequently chosen to go ahead with the bridge project.

15.90 The company then refined its bridge design using 250-metre spans and cone-shaped piers at the waterline. The ice committee reviewed the decision and concluded that it met the criteria for ice delay and would not result in significant impacts on the land-fast ice and the ice scour of the sea floor.

Developer's Environmental Management Plan was approved

15.91 Strait Crossing Development Inc. now moved to complete its Environmental Management Plan. This involved extensive public consultation and required the approval of the project's Environment Committee. It was submitted to Public Works and Government Services Canada in February 1993. The Plan contains an

environmental protection component and an environmental effects monitoring component (see Exhibit 15.7). The overall Plan is a dynamic, life-of-project document that can and, if necessary, will be amended as the project proceeds, using an approved process involving a full environmental impact assessment if required, with public consultation.

Delays due to legal challenges

15.92 Financial closing was delayed due to environmental and other challenges pursued through the federal court system. The government's generic environmental assessment process was challenged as insufficient to meet the requirements of the *Environmental Assessment and Review Process Guidelines Order*. The court agreed, and ruled that the initiating department, Public Works and Government Services Canada, had to conduct an environmental assessment and determine the environmental impacts of the bridge, using the specific design of the final selected bidder.

15.93 Accordingly, the government directed Strait Crossing Development Inc. to prepare an environmental evaluation of its bridge design. The evaluation was produced along with a report comparing it to the initial environmental evaluation. The government used these documents to complete an initial assessment in May 1993, which concluded that the potential adverse environmental effects of the project were either insignificant or manageable, using current practices. Public Works also concluded that the proposal could proceed, with appropriate action to lessen the bridge's impact on the environment. The document had the support of the federal and provincial experts on the Environment Committee.

15.94 This action was again challenged as insufficient under the *Environmental Assessment and Review Process*

Exhibit 15.7

Major Components of the
Environmental Management Plan

ENVIRONMENTAL PROTECTION		
OBJECTIVES	SCOPE	ACCOUNTABILITY/REPORTING
<ul style="list-style-type: none"> To document environmental concerns and appropriate protection measures. To provide concise and clear instructions to project personnel regarding procedures for protecting the environment and minimizing environmental impacts. To ensure that commitments that minimize environmental impacts will be met. 	<ul style="list-style-type: none"> Life of project with plans for each stage: <ul style="list-style-type: none"> Staging-area site development and operation Land-based construction Marine construction Operation and maintenance Environmental protection procedures for activities in P.E.I. and N.B., including regular inspections. Contingency plans and emergency response plan for spills of hazardous materials, wildlife encounters, heritage resources and fires includes: <ul style="list-style-type: none"> staff education and training; key contact list 	<ul style="list-style-type: none"> Developer reports weekly, monthly and annually on environmental activities, procedures, and as required on accidents, spills, etc. Report to project team via Chair of Environment Committee. Action recommended/taken by Environment Committee as appropriate. May result in amended design/procedures that might require temporary delay or work stoppage.

ENVIRONMENTAL EFFECTS MONITORING (EEM)		
OBJECTIVES	SCOPE	ACCOUNTABILITY/REPORTING
<ul style="list-style-type: none"> To provide Strait Crossing Inc. (SCI) with baseline data so the construction schedule can be formulated to avoid conflict with valued environmental components. To verify earlier impact predictions. To evaluate the effectiveness of mitigation and to identify the need for improved or altered mitigation. To provide an early warning of undesirable change in the environment. To improve environmental understanding of cause and effect relationships. 	<ul style="list-style-type: none"> Scientific studies designed by experts to meet objectives. Separate terrestrial and marine programs set up. Careful consideration given to existing data. Potential cumulative effects considered. In addition to studies on existing biophysical resources, SCI committed to enhancing environmental habitat where feasible and desirable. Where feasible, environmental monitoring required by regulatory authorities undertaken to augment or complement effects monitoring programs. 	<ul style="list-style-type: none"> Study plans and results reviewed by independent advisory committees of experts for each program and by Environment Committee and Fisheries Liaison Committee. Annual reports to Environment Committee, the public, stakeholders, regulatory authorities and independent advisory committees. Reports identifying data gaps, methodological problems, statistical validity and need to modify future monitoring. Provision for an EEM Review Process for the development, extension, evaluation and revision of the studies over the life of the project. Involves consultations with regulatory authorities, stakeholders and the public.

The execution of the overall Environmental Management Plan safeguards the environment during ongoing activities and emergencies, and provides for the training of personnel to handle both situations.

Problems that occur in day-to-day operations are being handled by the project's Environment Committee. This seems to be working satisfactorily, as we found no evidence to the contrary in the files.

Guidelines Order. However, the court ruled in the government's favour and stated that the action not only met but exceeded the requirements of the Order. A subsequent appeal was rejected by the court on 23 June 1995.

Environmental effects of bridge construction are being monitored

15.95 Although the Environmental Assessment and Review Process was followed in designing the bridge and planning for its operation, the degree of environmental protection incorporated into the project becomes apparent only as it is implemented. In this process, the execution of the overall Environmental Management Plan safeguards the environment during ongoing activities and emergencies, and provides for the training of personnel to handle both situations. The Plan will be in effect until the bridge reverts to the government (35 years after its completion) and the government assumes full responsibility for environmental protection.

15.96 The Environment Committee oversees the implementation of the Plan. Individual federal and provincial agencies conduct inspections to ensure compliance with their respective environmental legislation, and problems are handled by their representatives on the Committee.

15.97 Ongoing activities are controlled by the Plan's environmental protection component. The developer submits regular monthly reports on the implementation to the Environment Committee, which takes action as appropriate.

15.98 Predictions of impact are tested and the effects of mitigation on ecosystems are monitored under the Environmental Effects Monitoring Program, which has marine and land-based components. An independent

advisory committee (appointed by the developer) oversees this program and submits annual reports on it. The 1993 results were published in April 1994 and resulted in no major changes to the program.

15.99 If problems occur in operations, or unforeseen impacts on the environment are revealed by the monitoring program, either aspect of the Environmental Management Plan can be amended under the supervision of the Environment Committee and in consultation with stakeholders and the public. Problems that occur in day-to-day operations are being handled by the project's Environment Committee. This seems to be working satisfactorily, as we found no evidence to the contrary in the files.

15.100 The Department's Environmental Services Unit conducted its own compliance audit of ongoing operations in 1994. While the report indicated that some problems had been encountered and later had been rectified (according to the manager of Environmental Services) the Department's auditors found that areas of non-compliance were generally minor and that, in several cases, environmental protection measures exceeded what was required.

Government is managing the project's environmental aspects appropriately

15.101 The Department carried out its responsibilities as the initiating entity under the *Environmental Assessment and Review Process Guidelines Order* from the very beginning of the fixed link project. The necessary documentation was produced and reviewed by government, private sector experts and the public primarily through the hearings of the Environmental Assessment Review Panel appointed for that purpose. The panel's recommendations were incorporated into the final design of the bridge and into

construction and operational plans and procedures to minimize environmental impacts. This protection is embodied in the Environmental Management Plan, which stipulates that the developer is accountable for the environmental health of the project during its 35-year period of the operation of the bridge.

15.102 The Plan sets out specific procedures for the developer to follow and requires him to record any inconsistencies. Daily reports are on record specifying any such incidents together with corrective action taken. The Plan enables the developer to measure performance and report to the project's Environment Committee, which takes appropriate corrective action.

15.103 The Plan also requires the collection of vital information on the effectiveness of the environmental assessment process itself and on the response of land-based and aquatic ecosystems to the project. This information contributes to our knowledge of the coastal biophysical environment of the Northumberland Strait and is invaluable for the future management of the coastal zone. Megaprojects such as the fixed link require extensive environmental baseline data for assessing environmental impacts before deciding to proceed or not, and for developing environmentally friendly procedures for approved projects. In this case, the federal government spent over \$15 million on environmental and technical studies. We hope that such information will be built into existing government databases to reduce the costs of obtaining environmental baseline data for future megaprojects in this region. It should be noted that the Plan and related process for the project were awarded the 1994 Canadian Construction Award for Environmental Achievement.

15.104 The project's environmental aspects are being handled within the intent of the Environmental Assessment and Review Process. However, the government's performance in meeting the requirements of the *Environmental Assessment and Review Process Guidelines Order* did lead to litigation, with both direct costs (approximately \$1 million) and indirect costs to the government from long delays in the project.

Project Monitoring

Construction and operating risks are assumed by the developer

15.105 The role of project monitoring is traditionally associated with project ownership. Monitoring assures that a party to an agreement receives what it is entitled to and pays no more than the amount committed in the agreement. This translates into three prime areas of concern or risk when entering into an agreement:

- Is the product or service contracted for constructed and delivered properly? That is, does it meet the project requirements in function and quality?
- Is the project delivered on the specified timeline?
- Is the cost as agreed upon?

15.106 For the fixed link project, these concerns have been transferred to the private sector developer/contractor, as the builder-owner-operator of the bridge for the first 35 years. The government's primary interest is in seeing that the project is executed as per the agreements and that a bridge will be functional for an additional 65 years after the initial 35-year franchise.

The project's environmental aspects are being handled within the intent of the Environmental Assessment and Review Process.

The government's primary interest is in seeing that the project is executed as per the agreements and that a bridge will be functional for an additional 65 years after the initial 35-year franchise.

The Crown and the developer have agreed on a third-party mechanism to address the traditional concerns of product quality, project schedule and cost.

Due to the project's complexity and environmental sensitivity, the expertise of outside organizations was considered crucial to the project.

Independent engineer monitors quality and progress of the work

15.107 The Crown and the developer have agreed on a third-party mechanism to address the traditional concerns of product quality, project schedule and cost. The independent engineer is responsible for reviewing the developer/contractor's quality management plan and its appropriateness and effectiveness. He also verifies progress against work claimed by the developer, and triggers the release of funds to the developer for work accomplished, as permitted under the work breakdown structure and the cost-to-complete system (see paragraph 15.68). The independent engineer has an on-site presence and has full access to take samples, examine records, or do anything else necessary to ensure that work is done in compliance with the project requirements. The independent engineer is responsible to the Crown and the developer/contractor jointly. Any deficiencies reported to date have been resolved to the satisfaction of all parties.

Government monitors compliance with project agreements

15.108 Given the incorporation of the independent engineer function in the project, the government's primary role is to monitor compliance with the project agreements by the various parties (the developer/contractor, the independent engineer, the security trustee, etc.) with the objective of safeguarding the comprehensive security package in the government's interest, should the developer/contractor fail to complete the project. Additionally, the Crown is responsible, along with provincial authorities, for acceptance of the approach roads leading to the bridge and for compliance by the developer/contractor with their respective environmental management plans.

15.109 The government monitors the project from a site office located in Charlottetown, P.E.I. The project team is comprised of specialists in engineering, industrial benefits and environmental compliance, who visit the site regularly, meet with the developer's representatives and conduct audits to ensure that the developer's contractual commitments are met.

15.110 Three separate reviews requested by the government are currently under way by an outside public accounting firm. It is examining compliance with the provisions of the agreements related to the trust company's monthly certification of funds on hand to complete construction; the independent engineer's cost-to-complete framework; and the contractor's project records.

15.111 The project office's expenditures to late 1997 are budgeted at about \$46 million, of which 80 percent has been spent to date. These expenditures relate primarily to direct costs of the project office (such as salaries and office equipment); setting the procurement requirements for both the construction and the operation phases; and technical and environmental feasibility studies conducted on behalf of the government by third-party organizations (about \$15 million). Due to the project's complexity and environmental sensitivity, the expertise of these organizations was considered crucial to the project. We found that Public Works and Government Services Canada made satisfactory use of this expertise.

15.112 At mid-July 1995 all of the main elements necessary for assembling the bridge in Northumberland Strait were in place. The fabrication yards in Borden, P.E.I. and Bayfield, New Brunswick are complete and have produced prefabricated pier bases, main spans and drop-in spans.

The heavy lift vessel has arrived safely from Europe and is preparing for a series of tests before bridge assembly begins. The independent engineer has reported that sufficient funds remain in the trust funds to complete the bridge.

Information to Parliament

Government has not been recording its liability on the balance sheet

15.113 This financing transaction has been structured to be completely “off-balance-sheet”. Strait Crossing Finance Inc. and consequently its shareholder, New Brunswick, do not report the bonds payable in their financial statements: the substance of the transaction is that the debt will be fully serviced, through the bond trustee, by Canada’s commitment to irrevocable payment. Bond rating agencies have granted Strait Crossing Finance Inc. a rating identical to that of the Government of Canada, and Canadian securities authorities permit institutional investors to acquire and trade the bonds as though they were government securities.

15.114 The \$661 million in bonds payable have not been included to date in Canada’s summary financial statements because legally they are not considered government debt. The *Northumberland Strait Crossing Act*, passed in June 1993, authorized the government to make annual payments over 35 years of \$41.9 million in 1992 dollars, indexed to inflation. A liability for these future subsidy payments has not been recorded by Canada because the government accounts for subsidy payments only on an annual basis. In the summary financial statements in the 1993–1994 Public Accounts, the total of these future subsidy payments was included in a note on contractual commitments for transfer payment agreements. No further disclosure in the

Public Accounts was provided for the fixed link.

15.115 At the time of writing, the government was studying the appropriate way to account for and disclose the fixed link transaction in the 1994–1995 Public Accounts. Preliminary indications are that the government intends to record its interest in this project in the 1994–1995 Public Accounts. We will be reviewing the final results of this study as part of our audit of the government’s summary financial statements included in the 1994–1995 Public Accounts. The Auditor General will also comment specifically on this issue in his observations on those financial statements and both will be published in the 1994–1995 Public Accounts, to be tabled in Parliament later this year.

Little ongoing project information has been reported to Parliament

15.116 This project represents a significant change in the method of meeting the federal government’s constitutional commitment to Prince Edward Island. Parliament needs to receive adequate information to allow it to carry out its scrutiny role. In conjunction with the debate on the amendment to the *Constitution Act* to permit a fixed link, the Minister of Public Works and Government Services Canada provided an overview of the project including a brief summary of the financing arrangements. But little ongoing information about the project has been reported to Parliament since then.

15.117 The primary vehicle for reporting to Parliament on departmental operations is Part III of the Estimates. In accordance with current government reporting guidelines, Public Works and Government Services Canada has provided little information on this project in its Part III

This financing transaction has been structured to be completely “off-balance-sheet”.

At the time of writing, the government was studying the appropriate way to account for and disclose the fixed link transaction in the 1994–1995 Public Accounts.

because to date the government has not incurred any major expenditures.

15.118 As we have noted in previous years' chapters on departmental reporting, government should report on its stewardship of all its significant duties and obligations, whether or not they involve annual spending. In addition, when more than one department or jurisdiction is involved in the delivery of a project or activity, there is a need for one department to take the lead role in gathering and reporting information to Parliament on the stewardship of the overall project.

15.119 Public Works and Government Services Canada could include as supplementary information in its Part III a brief overview of the project, including its objective, the departments and groups involved and their roles, the financing arrangements and a status report on progress to date.

Conclusion

15.120 To meet its constitutional obligation to Prince Edward Island, the federal government decided to build a bridge across the Northumberland Strait. The bridge was seen as a means of providing a fixed transportation link, with greater efficiency and at no greater cost than the present ferry service subsidy.

15.121 Given its serious deficit, the government did not wish to provide the up-front capital to finance construction of the bridge in the typical manner of a Crown-constructed project. Instead, it decided to enter into a development concept known as a Build-Own-Operate and Transfer (BOOT) with a private sector consortium. This concept, although gaining acceptance by other jurisdictions, is relatively new to the federal government.

15.122 From the government's viewpoint, it had to ensure that the six important features of the project (see paragraph 15.22) were clearly understood and adhered to. This meant putting in place appropriate processes as well as an elaborate agreement structure. These were time-consuming and expensive undertakings on the part of both parties.

15.123 Because of the development concept and nature of the project and the supporting agreements, both the government and the developer have had to commit to major undertakings, which include, on the government's part, unconditional and irrevocable payments to bondholders, and on the developer's part, the assumption of most of the risks related to the construction and operation of the bridge for 35 years as well as the provision of a comprehensive security package.

15.124 Our intention in examining the fixed link project at this time was to provide an early warning to Parliament of any significant potential problems, as well as opinions on the management of various aspects of the project.

15.125 Based upon our areas of audit concentration (see paragraphs 15.23 to 15.25), we have been able to draw a number of positive conclusions. For example, the procurement process was transparent and reasonable; the security package is comprehensive and should provide adequate protection to the Crown; the advance tax rulings provided to the consortium did not violate the intent of the *Income Tax Act*; and the requirements of the Environmental Assessment and Review Process were met. We also concluded that the fixed link project shows definite improvement over previous megaprojects, specifically in the protection of the Crown against potential cost overruns and withdrawal of support

by private sector contractors, follow-up of the environmental requirements and provision of project information.

15.126 However, we conclude that the annual transport subsidy the government agreed to pay to finance the project is at the high end of the range of estimates for the present ferry subsidy. Also, we note that Parliament has received little in the way of stewardship reporting on the project in Part III of the Estimates.

15.127 One major concern we noted in this project was in the financing. The complex off-balance-sheet financing arrangement is a more expensive departure from the practice of direct borrowing by government for the

acquisition of infrastructure assets, in this particular case resulting in an additional estimated cost of \$45 million. The government will need to weigh carefully the costs and benefits of using such off-balance-sheet financing arrangements for any future projects.

15.128 The government has significant contractual responsibilities and financial requirements associated with the project. It will have to monitor the project and manage its obligations well in the coming years.

15.129 We will continue to monitor the project, specifically on environmental issues and the overall results of the bridge construction.

The government has significant contractual responsibilities and financial requirements associated with the project. It will have to monitor the project and manage its obligations well in the coming years.

Audit Team

Bernard Barry
Terry Dejong
Serge Huot
Tom Koplyay
Cyril Lee-Shanok
Rosemary Marenger
Geoffrey Robins

For further information, please contact Tony Brigandi, the responsible auditor.

Report of the Auditor General of Canada to the House of Commons – 1995

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to the House of Commons

Chapter 16
Revenue Canada: Air Transportation Tax

October 1995

**Report of the
Auditor General
of Canada
to the House of Commons**

Chapter 16
Revenue Canada: Air Transportation Tax



October 1995

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Chapter 16

Revenue Canada

Air Transportation Tax

The audit work reported in this chapter was conducted in accordance with the legislative mandate, policies and practices of the Office of the Auditor General. These policies and practices embrace the standards recommended by the Public Sector Accounting and Auditing Board (PSAAB) of the Canadian Institute of Chartered Accountants.

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Revenue Canada

Air Transportation Tax

Assistant Auditor General: Shahid Minto

Responsible Auditor: Jim Ralston

Main Points

16.1 The Air Transportation Tax (ATT) was put in place in 1974. For the year ended 31 March 1995, revenue from the tax totalled almost \$589 million. Revenue Canada administers the tax and transfers its proceeds to Transport Canada where they are applied against expenditures for facilities and services provided in respect of air travel.

16.2 The key administrative memorandum relating to the ATT was issued in 1989 and has not been updated to reflect subsequent amendments to the applicable legislation. In 1993, Revenue Canada started a project to replace the old memorandum with a new document in loose-leaf format to facilitate updating. At this time, only a draft version of the document is available.

16.3 There is no centre of ATT expertise in Revenue Canada. The Department's headquarters is organized along functional lines, and responsibility for dealing with the 182 air carriers licensed to collect the tax is decentralized in district offices. The low volume of ATT-related workload in most locations affects the Department's ability to maintain the expertise needed to conduct audits and provide rulings or other assistance to air carriers. There is also a risk that air carriers will be treated inconsistently in different regions of the country.

16.4 Audit coverage has been weak in recent years due to the demands placed on audit resources by the introduction of the Goods and Services Tax. There has been some resurgence of effort recently in some district offices. During the period in which coverage was low, a number of taxation years became "statute barred" (unavailable for audit) for one major carrier. A significant loss of revenue may have resulted.

16.5 Some large balances of outstanding ATT have become uncollectable due to the financial difficulties experienced by certain air carriers in the years following deregulation of the air transportation industry. The largest part of the dollar value of accounts receivable, which totalled almost \$21 million at 31 March 1995, is represented by 10 air carriers.

Introduction

16.6 The Air Transportation Tax (ATT) has existed since 1974. ATT revenue for the 1994–95 fiscal year amounted to \$588.8 million. Exhibit 16.1 shows the distribution of revenue by certain categories of air carrier; it also shows that the great majority of revenue is collected through a relatively small number of carriers. ATT is levied on individuals, in the case of scheduled flights, and on charterers, in the case of charter flights; it is not charged on transportation of cargo. In the most common situation, travel agents collect the tax and remit it to air carriers who, in turn, remit it to Revenue Canada. Thus, air carriers are agents for collection of the tax.

16.7 The tax is triggered by the departure from a Canadian airport of a fixed-wing aircraft that has a maximum certified take-off weight of more than 8,000 kilograms and is operated by a carrier licensed for ATT purposes. Different rates of taxation apply depending on whether a flight is scheduled or chartered and on the route taken by the ticket holder (Exhibit 16.2).

16.8 Authority for the tax is the *Excise Tax Act*. The Air Transportation Tax is

administered by Revenue Canada, which transfers the revenue to Transport Canada where it is netted against an operating expenditure vote to cover the cost of facilities and services. At present, ATT revenue is being applied against the cost of operating the Air Navigation System (ANS).

16.9 The 27 February 1995 Budget announced the government's intent to privatize the Air Navigation System. A document put out by Transport Canada indicates that, as a result of the ANS privatization, the Air Transportation Tax will be reduced or eliminated. No definite time frame for this action has been given.

Audit Objective and Scope

16.10 Our audit objective was to assess whether Revenue Canada's administration of the Air Transportation Tax serves to secure an effective check on the assessment and collection of revenue.

16.11 Our audit was conducted at the head offices of Revenue Canada and at selected district offices. We also interviewed representatives of Transport Canada as well as representatives of the air transportation industry.

Domestic Air Carriers – Five Largest Balances	\$ 384.0	65%
U.S. Air Carriers – Five Largest Balances	105.4	18%
Other Foreign Air Carriers – Five Largest Balances	41.4	7%
All Other Air Carriers	58.0	10%
Total	\$ 588.8	100%

Exhibit 16.1

**Air Transportation Tax Revenue
for the Year Ended 31 March 1995
(in millions)**

Distribution by Category of Air Carrier

Observations and Recommendations

Air Transportation Tax Legislation and Memoranda

The combination of changes within the industry and the introduction of the GST has caused several questions of technical interpretation to arise.

16.12 Legislation must be sufficient to support effective and efficient tax administration. Since the legislation governing the Air Transportation Tax was put in place, there have been significant changes in the way the air transportation industry operates, largely due to decreased regulation of the industry. Also, the Goods and Services Tax (GST) has affected tax administration; the GST and ATT may or may not apply to the same transaction.

16.13 The combination of changes within the industry and the introduction of the GST has caused several questions of technical interpretation to arise. This is part and parcel of tax administration. Nevertheless, it is important that Revenue Canada and the air transportation industry, working with or through the Department of Finance and the court system, where appropriate, identify and correct technical flaws in the legislation that can lead to

anomalous results and unnecessarily high compliance costs.

Revenue Canada has plans to replace the outdated excise memorandum on the ATT

16.14 It is important that information be made available to taxpayers and other interested parties to assist them in understanding the requirements of the applicable legislation. At the time of our audit, guidance concerning the Air Transportation Tax was contained in excise memorandum ET108, dated 31 March 1989. Amendments to the legislation governing the ATT since that date had not been reflected in that memorandum. In addition, Revenue Canada had determined that some definitions contained in the memorandum were incorrect.

16.15 We have been informed that in the fall of 1995 Revenue Canada will revoke excise memorandum ET108. In the fall of 1993, the Department started a project to develop a new ATT memorandum for general use in the Department and by carriers. To make it easier to keep up-to-date, the Department plans to issue the memorandum in loose-leaf format. The various parts of the

Exhibit 16.2

Partial Tabulation of Air Transportation Tax Rates

	Transportation begins and ends at points within the taxation area with an emplanement in Canada	Transportation begins at a point inside the taxation area and ends at a point outside the taxation area with an emplanement in Canada
Scheduled Air Carriers	Ad Valorem Tax: 7 percent of retail price of ticket plus \$6 to a maximum of \$55	Specific Tax: \$55 on each amount paid or payable
Charter Air Carriers (paid or deemed to be paid in Canada)	Ad Valorem Tax: 7 percent of charter contract value plus \$3 per emplanement to a maximum of \$27.50 per emplanement	Specific Tax: \$55 per emplanement in Canada
Taxation Area: Canada, the continental United States, St. Pierre and Miquelon		

memorandum now exist in draft form. The first instalment is planned for release in September 1995 and the Department expects that all sections will have been issued by the end of December 1995. Pending release of replacement memoranda, air carriers will be advised to direct questions to the Department, where they will be answered individually.

16.16 Having out-of-date or incorrect information in circulation carries with it some obvious risks. We know of only one situation where an inaccuracy in internal Revenue Canada reference material has led departmental enquiries officers to give incorrect advice to air carriers; however, it illustrates that problems can arise. While Revenue Canada honoured the advice given so that the air carrier was not disadvantaged, too little ATT was charged, resulting in a small loss to the Crown. The Department took immediate steps to correct the inaccuracies.

It appears possible to avoid a portion of the ATT through tax planning

16.17 As a general rule, whenever a tax involves multiple rates or is levied at different points or on different bases, the possibility exists for taxpayers to try to minimize the amount of tax they pay by engaging in tax planning. This seems to be true for the Air Transportation Tax. During our audit we became aware of a technique by which licensed air carriers providing charter services could reduce their Air Transportation Tax liability. Details of how this technique works have been provided to Revenue Canada and the Department of Finance. At this time, no information is available on the extent to which this technique is being used. However, use of the technique is potentially offensive, as it could defeat the policy intent underlying the Air

Transportation Tax legislation and cause significant revenue leakage.

16.18 If the government decides to retain the Air Transportation Tax following the privatization of the Air Navigation System, Revenue Canada and/or the Department of Finance should evaluate the treatment of charter air transportation under the tax to determine if it is a source of significant revenue leakage.

Department's response: Neither Revenue Canada nor the Department of Finance has encountered evidence to indicate that revenue leakage is occurring. Once a policy decision has been made regarding the future of the Air Transportation Tax, Revenue Canada will assess with the Department of Finance whether inappropriate tax planning unforeseen by the ATT legislation is occurring.

Audit of Licensed Air Carriers

16.19 Effective tax administration requires, among other things, a strong audit function to ensure that the proper amount of tax is assessed and remitted to the government. The inherent risks associated with non-compliance demand that the audit function be directed at securing Crown interests on a timely basis. A strong audit function also requires sufficient resources to achieve its objectives, as well as staff who have the knowledge, skills and experience appropriate to their duties and who are provided with the tools needed to do their jobs.

A number of Revenue Canada personnel dealing with the ATT do not have much depth of experience with the tax

16.20 Except in two district offices servicing a fairly high number of air carriers, where a few auditors can

Having out-of-date or incorrect information in circulation carries with it some obvious risks.

Auditors primarily work on GST audits and only infrequently on ATT audits.

specialize in the Air Transportation Tax, auditors primarily work on GST audits and only infrequently on ATT audits. At headquarters, there is a designated officer responsible for the ATT audit activity.

16.21 Formerly, there was an annual conference of ATT auditors from the district offices but this practice has been discontinued. Lack of interaction among ATT auditors may be leading to audits that are less efficient and effective than they might be, because auditors are unable to share information on problems and best practices. Mitigating this concern somewhat is the fact that modern communications technology helps ATT auditors in different parts of the country consult with each other on specific matters.

16.22 There may be reason for concern that in some district offices the planned reorganization of audit activities will further dilute the emphasis that can be placed on the Air Transportation Tax. A reallocation of the ATT audit workload among district offices serving southern Ontario prompted one large foreign carrier to complain about the consequences of a loss in continuity and expertise of staff assigned to the audit of the carrier.

16.23 There are no training programs aimed specifically at the Air Transportation Tax. Training takes place on the job in district offices. A training task force within Revenue Canada's Verification, Enforcement and Compliance Research Branch, in its report dated April 1995, has identified potential training needs, which will be validated through a formal training needs assessment. Among the potential training needs identified is training on the basic concepts of the air transportation industry. The priority of this item will be determined after the needs assessment is completed.

16.24 Revenue Canada should create centres of Air Transportation Tax expertise, perhaps by centralizing ATT administration functions, including audit, in one or two district offices.

Department's response: Revenue Canada has a designated officer at headquarters responsible for the Air Transportation Tax audit program whose expertise is readily available to field officers. Should the ATT be retained, Revenue Canada will examine alternatives to ensure that an appropriate distribution of ATT expertise is achieved.

Audit coverage is improving after a period in which it reached very low levels

16.25 Adequate plans for auditing the population of licensed air carriers are required. It is important that audits be performed efficiently, fairly and consistently. The Department ought to seek out and implement innovative audit methods and practices, where feasible and cost-effective.

16.26 At the headquarters level, there is an overall plan for the audit activity of which ATT audits form a part. This is reflected at the district office level where the bulk of effort is directed to GST audits. ATT licensees are extremely small in number compared to GST registrants. To date, Transport Canada has not been involved in determining an appropriate extent of ATT audit coverage. However, Transport does have an idea of what it would consider adequate and now has an agreement with Revenue Canada to obtain information on the latter's audit plans for monitoring purposes.

16.27 For several years, low levels of audit coverage have been a concern to Transport Canada, which relies on the Air Transportation Tax as a major source of revenue. Its concerns were intensified when the GST was introduced since it felt that the additional demand on Revenue

Canada's audit resources might cause ATT audit coverage to weaken further.

Transport Canada was concerned about one large carrier in particular, since the long interval between audits created a risk that certain taxation years would become "statute barred", meaning that Revenue Canada could not audit them. This in fact did occur and seven years were not covered by audit. Based on the results of audits performed before and after the statute barred period, it is reasonable to expect that a loss of millions of dollars of revenue may have resulted.

16.28 Audit coverage has improved recently. In the last four years, Revenue Canada has performed 35 ATT audits resulting in total assessments of tax, interest and penalty in excess of \$20 million. Of these audits, 28 were performed in the last two years. The total population of licensed air carriers numbers 182.

16.29 With respect to the failure to audit one large carrier for several years, we are advised that changes in departmental policy will prevent such occurrences in the future. The "large file program", which existed for many years in the former Taxation department, will be extended to cover all types of tax revenue, including the ATT, now that Taxation has been merged with Customs and Excise. Taxation's policy on the large file program stated that "large cases" would be audited every two years; under the merged Revenue Canada entity, this policy will be changed to require full-scope audits of large corporations at least twice within a five-year span and limited-scope reviews in other years.

Absence of up-to-date guidance for ATT audits poses a danger that inappropriate or inconsistent audit approaches will be used

16.30 An audit guide designed for use in ATT audits was issued in 1983 and amended in 1987; it is still available for use. This audit guide is even older than excise memorandum ET108, which is outdated and soon to be revoked. Auditors told us that the ATT audit guide does not reflect the way audits are normally performed now and so is used infrequently. Revenue Canada's Audit Laptop System contains an air transportation industry profile and certain general audit guides designed for GST that can be applied to ATT audits. When the general ATT memorandum discussed in paragraph 16.15 is finalized, Revenue Canada plans to use it as a basis for development of an audit manual for ATT field auditors. The Department is currently updating the air transportation industry profile within the Audit Laptop System and is incorporating certain information of specific relevance to the ATT in the profile.

16.31 Our examination of completed audit files revealed a variety of audit approaches used in different district offices. The air transportation industry is aware that different approaches are used and is concerned that all carriers may not be treated equitably. In our view, the fact that audits are performed differently does not necessarily indicate inequitable treatment. Differences in air carriers' record-keeping practices or differences in the level of risk of non-compliance associated with particular carriers do justify tailored audit approaches. However, such differences ought to occur

In the last four years, Revenue Canada has performed 35 ATT audits resulting in total assessments of tax, interest and penalty in excess of \$20 million.

We do not feel that an adequate audit-planning framework exists for the Air Transportation Tax.

within a consistently applied audit-planning framework. Given that the tools ATT auditors have at their disposal consist of an outdated audit guide and materials that were designed for use in audits of a different tax, we do not feel that an adequate audit-planning framework exists for the Air Transportation Tax.

16.32 Information that we obtained on notices of objection and on appeals to the courts in respect of the Air Transportation Tax indicates that several disputes have arisen over the audit techniques used by Revenue Canada. Out of 14 objections and appeals dating back to 1988, three involved disagreement over analytical techniques used by Revenue Canada and four involved disagreement over the Department's sampling procedures. In the case of one air carrier, the assessment issued pursuant to an audit was disputed for several years on the grounds that certain audit procedures used to arrive at the assessment were inappropriate. As a result of this case, Revenue Canada, in a subsequent audit of the same air carrier, made important adjustments to its approach in order to produce a more defensible result.

16.33 Revenue Canada should develop a framework for ATT audit planning to ensure that appropriate audit techniques are selected for use and are consistently applied.

Department's response: Today, Air Transportation Tax audits are included in Revenue Canada's audit workplans. In order to ensure quality and consistency in departmental audits, whether they relate to ATT, GST or Income Tax, Revenue Canada has, as part of its restructuring, introduced a Quality Assurance Program. Through the quality assurance reviews that are conducted under the Program, the Department examines the application of

technical advice, policies and procedures to ensure consistency and to confirm that appropriate standards are met. The transfer of larger carriers to the Large Business Program will further assure consistency among these carriers. In the event that the ATT is retained, Revenue Canada will examine options for further enhancing measures to ensure consistent and appropriate audit techniques are applied nationally.

16.34 Headquarters relies on local review processes to ensure that audits are performed to an acceptable standard of quality. The headquarters audit function is involved in consultations with field auditors concerning particular cases.

16.35 One risk related to the Air Transportation Tax is that a carrier may fail to become licensed. To date, Revenue Canada has discovered unlicensed carriers through chance observations by auditors and through complaints from licensed carriers. In the past, Transport Canada provided Revenue Canada with information on licence applications that it could follow up on to ensure that carriers are licensed. However, Revenue Canada did not find this information useful; it needed information on approvals rather than on applications. Recently, Transport Canada has begun sending information on approvals and, in the future, this information will be the basis for follow-up by district offices.

16.36 Revenue Canada should develop a more organized approach to ensuring that air carriers, where appropriate, are licensed to collect ATT.

Department's response: Revenue Canada identifies air carriers from a number of different sources, including:

- referrals from the National Transportation Agency (NTA), listing new air carriers that they have licensed;

- *database matching between air carriers licensed for Air Transportation Tax on the Excise Commercial System and air carriers licensed by the NTA; and*

- *referrals/complaints from other air carriers.*

Should the ATT be retained, the Department will examine its procedures for verifying that air carriers required to collect the ATT are properly licensed to ensure that they are effective.

Collections and Revenue Accounting

16.37 It is important that the accounting system accurately accumulate data in sufficient detail to facilitate timely, meaningful reporting of financial information.

16.38 Revenue Canada accounts for the ATT using the Excise Commercial System (ECS), which is distinct from the Goods and Services Tax system. When the ECS was developed, the Federal Sales Tax represented the bulk of the volume. Since that tax no longer exists, the ECS is not being improved.

16.39 Because proceeds of the ATT are added to its operating appropriation, Transport Canada requires timely and accurate transfers of revenue to enable it to manage its expenditures. This is most important near the end of the fiscal year, at which time Transport Canada needs to ensure that it does not spend more funds than are available in the appropriation. Problems experienced in the recent past with the timeliness of transfers appear to have been resolved. Transport Canada uses information that it has to monitor transfers in respect of selected air carriers.

16.40 As a consequence of the merger of the former Taxation and Customs and Excise departments, Revenue Canada is in the process of consolidating its collection function. Consolidation is meant to remedy problems that can occur when, for example, a collection officer is dealing with a company, such as an air carrier, that owes money for more than one type of tax (for example, ATT, GST or income tax). At present, the collection officer does not have simultaneous access to information on all outstanding tax balances. To get a complete picture of the air carrier's status, the officer needs to consult multiple systems. This is a source of some inefficiency. Revenue Canada is presently developing an umbrella system that will take information from the income tax and GST systems in order to produce a consolidation of outstanding tax debts. In a subsequent phase of development, this system will be expanded to include other types of tax revenue; however, Revenue Canada's preliminary assessment is that it may not be cost-effective to include the Air Transportation Tax in the integrated revenue collections system due to the small number of accounts involved relative to the associated information technology development costs. An alternative might be to develop a manual system for the ATT.

16.41 During our audit we encountered difficulties in obtaining various information and analyses on ATT revenue and accounts receivable from the Department. The apparent causes of the problems are limitations in the Excise Commercial System and the difficulties departmental staff have in using the system, now that it is no longer applicable to one of the Department's main revenue sources.

Problems experienced in the recent past with the timeliness of transfers appear to have been resolved.

Virtually all of the \$8.1 million in accounts receivable over two years old belong to carriers in financial difficulty.

16.42 If Revenue Canada no longer finds it economical to maintain and upgrade the Excise Commercial System, the Department should consider an alternative to that system.

Department's response: Revenue Canada is currently reviewing the role of the Excise Commercial System. The Department is in the process of examining alternative methods of carrying out certain ECS functions. To date, two decisions have been made concerning the future of ECS:

- *The licensing component of ECS is scheduled to become part of the Business Number initiative in 1997.*

- *The accounting function of ECS will be integrated in the Standardized Accounting System in 1997-1998.*

The Department will continue to explore the feasibility of alternatives to the remaining components of the ECS, including the possibility of linking the accounts receivable component of that system to the Revenue Canada centralized collections system.

A large portion of ATT accounts receivable relates to carriers that experienced financial difficulties following industry deregulation

16.43 Substantially all of the dollar value of ATT accounts receivable as at 31 March 1995 is made up by just 10 air carriers out of the total population of 182 licensed carriers. Approximately \$17.3 million (83 percent) is owed by 7 domestic air carriers and approximately \$1.7 million (8 percent) is owed by 3 foreign air carriers. Total accounts receivable are \$20.9 million (Exhibit 16.3). Further analysis shows that \$16.2 million (77 percent) represents unpaid tax, \$2.3 million (11 percent) represents unpaid interest and \$2.4 million (12 percent) represents unpaid penalties (Exhibit 16.4).

16.44 An analysis of ATT accounts receivable by age of debt and category of air carrier (Exhibit 16.5) reveals an interesting pattern. The categories used are carriers experiencing financial difficulty, and other ("regular") carriers. Accounts receivable less than one year old amount to \$5.8 million (28 percent of the total) and almost all of this relates to

Exhibit 16.3

Air Transportation Tax Accounts Receivable as at 31 March 1995 (in millions)

Size Composition of Balances

Domestic Air Carriers – Seven Largest Balances	\$ 17.3	83%
Foreign Air Carriers – Three Largest Balances	1.7	8%
Total of Ten Largest Balances	19.0	91%
All Remaining Balances	1.9	9%
Total	\$ 20.9	100%

Exhibit 16.4

Air Transportation Tax Accounts Receivable as at 31 March 1995 (in millions)

Breakdown by Source

Tax	\$ 16.2	77%
Interest	2.3	11%
Penalty	2.4	12%
Total	\$ 20.9	100%

“regular” carriers. For the \$7.0 million in accounts receivable from one to two years old (33 percent of the total), just under one quarter pertains to “regular” carriers and the rest relates to carriers in financial difficulty. Virtually all of the \$8.1 million in accounts receivable over two years old (39 percent of the total) belong to carriers in financial difficulty. Several air carriers experienced severe financial difficulties following deregulation of the air transportation industry. In the past few years, Revenue Canada has written off five accounts receivable totalling \$12.1 million. Judging from the pattern shown in Exhibit 16.5, we can expect other large write-offs to follow.

16.45 It appears that, except for the carriers in financial difficulty, accounts receivable are generally paid in the normal course of business without Revenue Canada having to take collection action.

Conclusion

16.46 The deregulation of the air transportation industry and the introduction of the Goods and Services Tax had a significant impact on the administration of the Air Transportation Tax. Questions on interpretation of the

ATT legislation arose, administrative memoranda became outdated, audit coverage reached very low levels and ATT expertise available within the Department diminished. In addition, large write-offs of uncollectable accounts receivable occurred, more write-offs appear certain in the future, and the accounting system may no longer be viable.

16.47 In some important areas, problems are being addressed. Certain questions of legislative interpretation are before the courts for resolution, revised administrative memoranda are being prepared, and the level of audit coverage has rebounded considerably.

16.48 However, in other areas, problems persist. There is no up-to-date ATT audit-planning framework to ensure that auditors choose their audit approaches consistently. This is all the more significant because ATT administration is dispersed among several district offices and staff often have limited opportunity to develop knowledge of the tax and of the audit techniques appropriate to it. Also, departmental staff continue to use an accounting system for the Air Transportation Tax that is becoming obsolete. The recommendations contained in this chapter are offered as potential remedies for these remaining problems.

In some important areas, problems are being addressed.

	1994-95	1993-94	1992-93 and Prior	Total	Percentage
Regular	\$ 5.6	\$ 1.6	\$ 0.1	\$ 7.3	35%
Carriers in financial difficulty	0.2	5.4	8.0	13.6	65%
Total	\$ 5.8 28%	\$ 7.0 33%	\$ 8.1 39%	\$20.9 100%	100%

Exhibit 16.5

Air Transportation Tax Accounts
Receivable as at 31 March 1995
(in millions)

Breakdown by Age of Debt and
Category of Carrier

Audit Team

Tom Allen
Nabi Baksh
Jayanta Chatterjee
Dan Duguay

For further information, please contact Jim Ralston, the responsible auditor.

Report of the Auditor General of Canada to the House of Commons – 1995

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